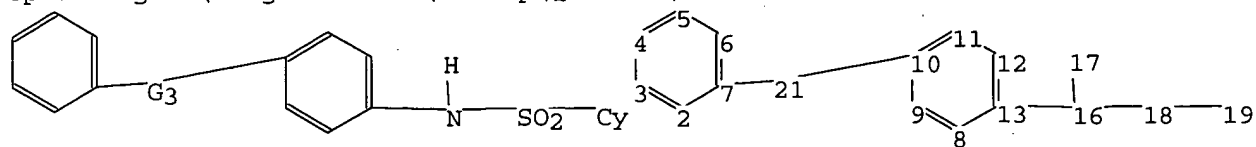


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* * * * * STN Columbus * * * * *

=>

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chain nodes :

16 17 18 19 21

ring nodes :

2 3 4 5 6 7 8 9 10 11 12 13

chain bonds :

7-21 10-21 13-16 16-17 16-18 18-19

ring bonds :

2-3 2-7 3-4 4-5 5-6 6-7 8-9 8-13 9-10 10-11 11-12 12-13

exact/norm bonds :

7-21 10-21 13-16 16-18 18-19

exact bonds :

16-17

normalized bonds :

2-3 2-7 3-4 4-5 5-6 6-7 8-9 8-13 9-10 10-11 11-12 12-13

isolated ring systems :

containing 8 :

G1:O,S

G2

G3:C,O,S

Match level :

2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom

12:Atom 13:Atom 16:CLASS 17:CLASS 18:CLASS 19:Atom 21:CLASS

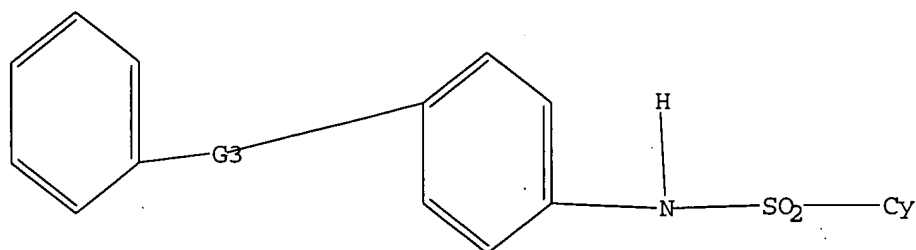
L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

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G1 O,S

G2

G3 C,O,S

Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

L3 1222 SEA SSS FUL L1

=> file ca

=> s l3

L4 482 L3

=> s l4 and py<2000

19363962 PY<2000

L5 403 L4 AND PY<2000

=> s l5 and (ppar or drug?)

5839 PPAR

722547 DRUG?

L6 20 L5 AND (PPAR OR DRUG?)

=> s l5 and drug?

722547 DRUG?

L7 18 L5 AND DRUG?

=> s l5 and ppar

15 PPAR

L8 0 L5 AND PPAR

=> s l5 and ppar

5839 PPAR

L9 2 L5 AND PPAR

=> s l5 and pharm?

518794 PHARM?

L10 27 L5 AND PHARM?

=> s l5 and modulat?

297078 MODULAT?

L11 2 L5 AND MODULAT?

=> s l6 or l7 or l8 or l9 or l10 or l11

L12 41 L6 OR L7 OR L8 OR L9 OR L10 OR L11

=> d ibib abs fhitr 1-41

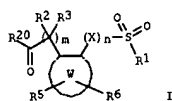
10/810,325

10/810,325

L12 ANSWER 1 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 139:307685 CA
 TITLE: Preparation of sulfonyl aryl or heteroaryl hydroxamic acid compounds as matrix metalloprotease inhibitors
 INVENTOR(S): Bedell, Louis J.; McDonald, Joseph J.; Barta, Thomas E.; Becker, Daniel P.; Rao, Shashidhar N.; Freskos, John N.; Mischke, Brent V.; Getman, Daniel P.; Decrescenzo, Gary A.; Villamil, Clara I.
 PATENT ASSIGNER(S): G.D. Searle and Co., USA
 SOURCE: U.S. Pat. Appl. Publ., 200 pp., Cont.-in-part of U.S. Ser. No. 230,209.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 10
 PATENT INFORMATION:

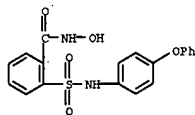
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003191317	A1	20031009	US 2000-728408	20001201
US 6794511	B2	20040921		
WO 9838859	A1	19980911	WO 1998-US4300	19980304 <--
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, GH, GW, HU, ID, IL, IS, JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 2001020021	A1	20010906	US 1999-230209	19990624
US 6380258	B2	20020430		
US 2003073845	A1	20030417	US 2001-909227	20010719
US 6696449	B2	20040224		
US 2005075374	A1	20050407	US 2004-867391	20040614
PRIORITY APPLN. INFO.: WO 1998-US4300 A1 19980304				
US 1999-310813 B1 19990512				
US 1999-230209 AZ 19990624				
US 1997-35182P P 19970304				
US 2000-569034 A2 20000511				
US 2000-728408 A2 20001201				

OTHER SOURCE(S): MARPAT 139:307685
 GI



AB The title compds. [I; m, n = 0 or 1 and the sum of m + n is 0 or 1; the

L12 ANSWER 1 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

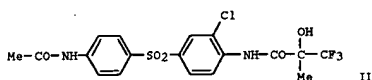
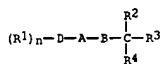
L12 ANSWER 1 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
 ring structure W is a 5- or 6-membered arom. or heteroarom. ring; X = CH2 or (un)substituted NH2; R1 = (i) a substituent contg. a 5- or 6-membered cyclohydrocarbyl, heterocyclyl, aryl or heteroaryl radical bonded directly to the depicted SO2 group or (ii) (un)substituted; R2, R3 = H, alkyl, alkenyl, alkynyl, hydroxyalkyl, O- or S-(un)substituted hydroxyalkyl or mercaptoalkyl, hydroxy, thiol, haloalkyl, N-(un)substituted amino, aminoalkyl, aminoalkoxy, aminoalkyl, aminoalkoxy, or aminoalkoxyalkyl, heterocyclyl, heterocyclylalkyl, heterocyclyloxy, heterocyclylthio, heteroaryl, heteroarylalkyl, heteroaryloxy, heteroarylthio, or CR2R3 together forms an (un)substituted 4- to 8-membered carbocyclic or heterocyclic ring, that is preferably a 5- or 6-membered ring; R5, R6 = H, alkyl, cycloalkyl, acylalkyl, halo, NO2, HO, cyano, alkoxy, haloalkyl, haloalkoxy, hydroxyalkyl, N-(un)substituted aminoalkyl or aminoalkoxy, thiol, alkylthio, arylthio, cycloalkylthio, cycloalkoxy, alkoxyalkoxy, perfluoroalkyl, haloalkyl, heterocyclyloxy, or R5 and R6 together with the atoms to which they are bonded form a further aliph. or arom. carbocyclic or heterocyclic ring having 5- to 7-members; R20 = each (un)substituted OH, NH2, or NH2] or pharmaceutically acceptable salts thereof are prepd. Also disclosed is a treatment process that comprises administering a contemplated sulfonyl aryl or heteroarom. ring hydroxamic acid compd. in a matrix metalloprotease (MMP) enzyme-inhibiting effective amt. to a host having a condition assoc. with pathol. MMP activity. Thus, thioetherification of 4-phenoxybenzenethiol with 2-fluorobenzaldehyde in the presence of K2CO3 in isopropanol under reflux for 20 h gave 2-[(4-phenoxyphenylthio)benzaldehyde which was condensed with tetra-ethyl dimethylammonium ethylenediphosphate in the presence of NaH in THF at room temp. for 4 h gave to 2-[(4-phenoxyphenylthio)phenyl]acetic acid (II). II was oxidized by H2O2 in acetic acid to 2-[(4-phenoxyphenylsulfonyl)phenyl]acetic acid which was condensed with O-tetrahydropyran-2-ylhydroxylamine using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride in MeCN followed by treatment with p-toluenesulfonic acid in methanol at room temp. for 2 h to give N-hydroxy-2-[(4-phenoxyphenylsulfonyl)phenyl]acetamide (III). III and N-hydroxy-2,3-dimethoxy-6-[[4-[(trifluoromethyl)phenoxy]-1-piperidinyl]sulfonyl]benzamide showed [IC50 of >10,000 nM against MMP-1, 0.3 and 2.4 nM, resp., against MMP-2, and 2 and 2.7 nM, resp., against MMP-13.

IT 308385-50-4P, N-Hydroxy-2-[[4-(4-phenoxyphenyl)amino]sulfonyl]benzamide
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of sulfonyl aryl or heteroaryl hydroxamic acid compds. as matrix metalloprotease inhibitors)
 RN 308385-50-4 CA
 CN Benzamide, N-hydroxy-2-[[4-(4-phenoxyphenyl)amino]sulfonyl]- (SCI) (CA INDEX NAME)

L12 ANSWER 2 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 132:22753 CA
 TITLE: Preparation of N-(arylsulfonylphenyl)-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide derivatives for the elevation of pyruvate dehydrogenase (PDH) activity
 INVENTOR(S): Butlin, Roger John; Nowak, Thorsten; Burrows, Jeremy
 PATENT ASSIGNER(S): Zeneca Limited, UK
 SOURCE: PCT Int. Appl., 211 pp.
 CODEN: PIXX02
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9962506	A1	19991209	WO 1999-GB1669	19990526 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2331685	AA	19991209	CA 1999-2331685	19990526 <--
AU 9940524	A1	19991220	AU 1999-40524	19990526 <--
AU 740909	B2	20011115		
BR 9910821	A	20010213	BR 1999-10821	19990526
EP 1082110	A1	20010314	EP 1999-923767	19990526
EP 1082110	B1	20040324		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200003524	T2	20011022	TR 2000-200003524	19990526
EE 200000691	A	20020415	EE 2000-691	19990526
JP 2002516854	T2	20020611	JP 2000-551762	19990526
NZ 507784	A	20021025	NZ 1999-507784	19990526
AT 262327	E	20040415	AT 1999-923767	19990526
PT 1082110	T	20040730	PT 1999-923767	19990526
ES 2217754	T3	20041101	ES 1999-923767	19990526
RU 2242224	C2	20041220	RU 2000-133221	19990526
ZA 2000006645	A	20020815	ZA 2000-6645	20011115
US 6498275	B1	20021224	US 2000-700370	20011115
NO 2000006010	A	20010126	NO 2000-6010	20011128
HK 1033652	A1	20040930	HK 2001-104230	20010619
US 2004009979	A1	20040115	US 2002-277957	20021023
PRIORITY APPLN. INFO.: GB 1998-11427 A 19980529				
WO 1999-GB1669 W 19990526				
US 2000-700370 A3 20011115				

OTHER SOURCE(S): MARPAT 132:22753
 GI



AB Aryl Ph sulfone and sulfoxide derivs. (I) [where ring D = (un)substituted Ph, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, or other 6-membered N-containing heteroaryl ring; R1 = (hetero)arylsulfonyl, (hetero)arylsulfinyl, (hetero)arylcarbonyl, (halo)alkyl, (halo)alkoxy, alkenyloxy, cyano, NO₂, halo, S-CF₃, OH, or a variety of (un)substituted functional groups; n = 1 or 2; R2 and R3 = independently (halo)alkyl or 3-5 membered (halo)cycloalkyl ring; A-B = NH-C(O), O-CH₂, S-CH₂, (trans)-vinylene, ethynylene, NH-C(S), or C(O)-CH₂; R4 = H, OH, halo, NH₂, or Me], and pharmaceutically acceptable salts or in vivo hydrolyzable esters thereof, were prepared. Pharmaceutical compns., methods, and processes for preparation of compds. of formula I are also described. For example, (R)-(+)-2-hydroxy-2-methyl-3,3,3-trifluoropropanoic acid (preparation given) was mixed with oxalyl chloride and added to 4-(4-acetamidophenylsulfonyl)-2-chloroaniline (preparation given) in DCM to yield (R)-N-[4-(4-acetamidophenylsulfonyl)-2-chlorophenyl]-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide (R)-(II). Title compds. elevate pyruvate dehydrogenase (PDH) activity (no data) and are useful in the treatment of diabetes mellitus, peripheral vascular disease, cardiac failure and certain cardiac myopathies, myocardial ischemia, cerebral ischemia and perfusion, muscle weakness, hyperlipidemia, Alzheimer's disease, and/or atherosclerosis.

IT 252018-30-7P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (target compound) preparation of
 N-(arylsulfonylphenyl)-2-hydroxy-2-methyl-3,3,3-trifluoropropanamide derivs. for elevation of pyruvate dehydrogenase (PDH) activity)

RN 252018-30-7 CA
 CN Propanamide, N-[2-chloro-4-[[4-[(phenylsulfonyl)amino]phenyl]thio]phenyl]-3,3,3-trifluoro-2-hydroxy-2-methyl-, (2R)- (9CI) (CA INDEX NAME)

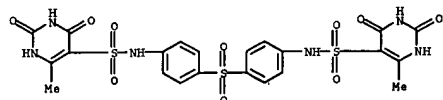
Absolute stereochemistry.

L12 ANSWER 3 OF 41 CA COPYRIGHT 2005 ACS on STN

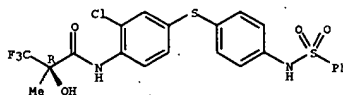
ACCESSION NUMBER: 131:164931 CA
 TITLE: Determination of 4,4'-diaminodiphenyl sulfone and its derivatives in biological samples by spectrophotometry and chromatography
 AUTHOR(S): Evgen'ev, M. I.; Garmonov, S. Yu.; Pogorel'tsev, V. I.; Shakirova, E. F.
 CORPORATE SOURCE: Kazan State Technological Univ., Kazan. 420015, Russia
 SOURCE: Journal of Analytical Chemistry (Translation of Zhurnal Analiticheskoi Khimii) (1999), 54(6), 543-548
 CODEN: JACTE2; ISSN: 1061-9348
 PUBLISHER: MAIK Nauka/Interperiodica Publishing
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Spectrophotometry and high-performance liquid and thin-layer chromatog. were used for determining medicinal substances such as 4,4'-diaminodiphenyl sulfone and tetrasodium 4,4'-bis-(3-phenyl-1,3-disulfopropylamino)-diphenyl sulfonate as their dinitrobenzoxadiazole derivs. in blood serum, urine, saliva, and gastric juices. The determination conditions were examined and optimized. The detection limit was 1 X 10⁻⁶ M. The procedures developed were used for investigating the kinetics and metabolism of xenobiotics in the human body.

IT 34941-71-4, Diucifone
 RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)
 (determination of diaminodiphenyl sulfone and derivs. in biol. samples by spectrophotometry and chromatog. in relation to pharmacokinetics)

RN 34941-71-4 CA
 CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



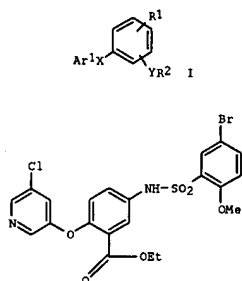
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 131:144406 CA
 TITLE: Preparation of PPAR-GAMMA modulators on treatment of type II diabetes and obesity
 INVENTOR(S): De La Brouse-Elwood, Fabienne; Jaen, Juan C.; McGee, Lawrence R.; Hiao, Shi-Chang; Rubenstein, Steven Marc; Chen, Jin-Long; Cushing, Timothy D.; Flygare, John A.; House, Jonathan B.; Kearney, Patrick C.
 PATENT ASSIGNEE(S): Tularik Inc., USA
 SOURCE: PCT Int. Appl., 88 pp.
 CODEN: P1XXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9938845	A1	19990805	WO 1999-US1147	19990120 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2318731	AA	19990805	CA 1999-2318731	19990120 <--
AU 9921176	A1	19990816	AU 1999-21176	19990120 <--
AU 759255	B2	20030410		
EP 1053227	A1	20001122	EP 1999-901492	19990120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6200995	B1	20010313	US 1999-234327	19990120
JP 2002501945	T2	20020122	JP 2000-530082	19990120
US 2001027200	A1	20011004	US 2000-741415	20001219
US 6620827	B2	20030916		
US 2002169185	A1	20021114	US 2001-894980	20010627
US 6583157	B2	20030624		
US 2003088103	A1	20030508	US 2002-123298	20020415
PRIORITY APPLN. INFO.:			US 1998-13042P	P 19980123
			US 1999-234327	A1 19990120
			WO 1999-US1147	W 19990120
			US 2000-214810P	P 20000628
			US 2000-741415	A1 20001219

OTHER SOURCE(S): MARPAT 131:144406
 GI



AB Title compds. [I: Ar1 is aryl, X is a divalent linkage of alkylene, alkyleneoxy, -O-, -C(O)-, -N(R11)-, -N(R11)C(O)-, -S(O)- and a single bond, in which R11 is hydrogen, alkyl, heteroalkyl, and arylalkyl and the subscript k is an integer of from 0 to 2; Y is a divalent linkage selected from alkylene, -O-, -C(O)-, -N(R12)-S(O)-, -N(R13)-S(O)-N(R13)-, -N(R12)C(O)-, -S(O)-, a single bond, and combinations thereof in which R12 and R13 are members independently selected from the group consisting of hydrogen, alkyl, heteroalkyl and arylalkyl; and the subscripts m and n independently integers of from 0 to 2; R1 represents a member selected from the group consisting of hydrogen, alkyl, heteroalkyl, aryl, arylalkyl, -CO2R14, -CO(R14), -C(O)NR15R16, -S(O)p-R14, -S(O)q-NR15R16, -O-C(O)-OR17, -O-C(O)-R17, -O-C(O)-NR15R16, -N(R14)-C(O)-NR15R16, -N(R14)-C(O)-R17 and -N(R14)-C(O)-OR17, in which R14 is hydrogen, alkyl, heteroalkyl, aryl and arylalkyl, and R15 and R16 are independently of hydrogen, alkyl, heteroalkyl, aryl and arylalkyl, or taken together with the nitrogen to which each is attached from a 5-, 6- or 7-membered ring; R17 R2 are independently of alkyl, heteroalkyl, aryl, arylalkyl; p = 0-3; q = 1-2] and pharmaceutical compds. containing the compds. described above for the treatment of conditions such as type II diabetes and obesity. Thus, the title compound II was prepared

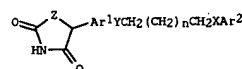
IT 235427-19-7P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of PPAR-GAMMA modulators on treatment of type II diabetes and obesity)
 RN 235427-19-7 CA
 CN Benzoic acid, 5-[[[(2,4-dichlorophenyl)sulfonyl]amino]-2-(3,5-difluorophenoxy)-, ethyl ester (9CI) (CA INDEX NAME)

L12 ANSWER 5 OF 41 CA COPYRIGHT 2005 ACS on STN

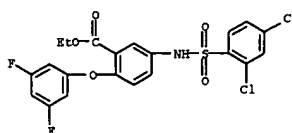
ACCESSION NUMBER: 131:73645 CA
 TITLE: Preparation of arylthiazolidinediones as agonists of peroxisome proliferator activated receptor.
 INVENTOR(S): Sahoo, Soumya P.; Tolman, Richard L.; Han, Wei; Bergmann, Jeffrey; Santini, Conrad; Lombardo, Vicki R.; Desai, Ranjit; Boueres, Julia K.; Gratale, Dominick F.
 PATENT ASSIGNEE(S): Merck & Co., Inc., USA
 SOURCE: PCT Int. Appl., 133 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9332465	A1	19990701	WO 1998-US27139	19981218 <--
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LX, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6008237	A	19991228	US 1998-213542	19981217 <--
CA 2315397	AA	19990701	CA 1998-2315397	19981218 <--
AU 9918334	A1	19990712	AU 1999-18334	19981218 <--
AU 740733	B2	20011115		
BR 9813801	A	20001003	BR 1998-13801	19981218
EP 1040102	A1	20001004	EP 1998-963283	19981218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
TR 200001753	T2	20001121	TR 2000-200001753	19981218
JP 2001526278	T2	20011218	JP 2000-525402	19981218
JP 3373198	B2	20030204		
ZA 9903232	A	19991111	ZA 1999-3232	19990511 <--
NO 2000003112	A	20000818	NO 2000-3112	20000616
BG 104602	A	20010131	BG 2000-104602	20000713
PRIORITY APPLN. INFO.:				
US 1997-68271P	P	19971219		
GB 1998-16279	A	19980727		
US 1998-105238P	P	19981022		
WO 1998-US27139	W	19981218		

OTHER SOURCE(S): MARPAT 131:73645
 GI



AB Title compds. [I: Ar1 = (substituted) arylene, heteroarylene; Ar2 = o-substituted aryl, heteroaryl; X, Y = O, S, imino, CH2; Z = O, S; n = 0-3], were prepared for treatment of diabetes, hyperglycemia, hyperlipidemia, atherosclerosis, obesity, vascular restenosis, etc. (no data). Thus, Me 4-hydroxyphenylacetate, Br(CH2)3Br, and K2CO3 were

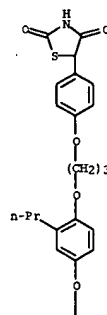


REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 5 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

stirred overnight in DMF to give Me 4-(3-bromophenoxy)phenylacetate. This was stirred with 4-phenoxy-2-propylphenol and Cs2CO3 in DMF at 40° overnight to give Me 4-[3-(2-propyl-4-phenoxyphenoxy)propoxy]phenylacetate. The latter was added to a mixt. of LiN(SiMe3)2 and Me3SiCl in THF at -78°, after 2 h N-bromosuccinimide was added and the mixt. was stirred overnight at room temp. to give the α-bromo deriv., which was stirred with thiourea and NaOAc in methoxyethanol at 115° for 5 h to give 5-[4-[3-(2-propyl-4-phenoxyphenoxy)propoxy]phenyl]-2,4-thiazolidinedione.

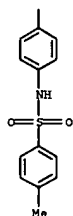
IT 228577-39-7P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn of arylthiazolidinedione derivs. as peroxisome proliferator activated receptor agonists)
 RN 228577-39-7 CA
 CN Benzenesulfonamide, N-[4-[4-[3-(2-propyl-4-phenoxyphenoxy)propoxy]phenyl]-4-methyl- (9CI) (CA INDEX NAME)



10/810,325

L12 ANSWER 5 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 6 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:332470 CA
TITLE:

Pyrimidine derivatives modulate expression of key cell surface molecules on immunocytes: evidence for a systemic immunopotentiatory effect
Tsibul'kin, A. P.; Slabnov, Yu. D.; Pozdeev, O. K.; Cherepnev, G. V.; Garaev, R. S.; Istamov, Kh. I.
Kazan. Gos. Med. Akad., Kazan, Russia
Immunologiya (Moscow) (1998), (4), 29-33
CODEN: IHUNDA; ISSN: 0206-4952
Meditsina

AUTHOR(S):

CORPORATE SOURCE:
SOURCE:

PUBLISHER:

DOCUMENT TYPE:

LANGUAGE:

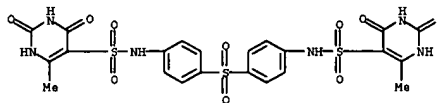
AB Pyrimidine derivs. xymedone and diuciphone, tested in a set of immunodeficiency models in vitro (10-3 M) and in vivo (30 mg/kg), upregulated ER expression on lymphocytes and FcγR/C3bR expression on antigen-presenting cells. These were accompanied by restoration of T-cell immune response as proved by delayed-type hypersensitivity reaction and an increase in antibody producers to SRBC. Mechanisms of a systemic immunopotentiatory effect of pyrimidine derivs. are discussed.
34941-71-4, Diuciphone

IT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pyrimidine derivs. modulate expression of key cell surface

mols. on immunocytes: systemic immunostimulatory effect)

RN 34941-71-4 CA

CH 5-pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 7 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 130:223060 CA
TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

130:223060 CA

Preparation of pentafluorobenzenesulfonamides for treating atherosclerosis and hypercholesterolemia
Medina, Julio Cesar; Clark, David Louis; Flygare, John A.; Rosen, Terry J.; Shan, Bei
Tularik Inc., USA
U.S., 28 pp., Cont.-in-part of U.S. Ser. No. 605,431, abandoned.
CODEN: USXXAM

U.S., 28 pp., Cont.-in-part of U.S. Ser. No. 605,431, abandoned.

U.S., 28 pp., Cont.-in-part of U.S. Ser. No. 605,431, abandoned.
CODEN: USXXAM

Patent

English

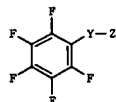
2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5880151	A	19990309	US 1997-896827	19970718 <--
EP 1334719	A2	20030813	EP 2003-9125	19970222
EP 1334719	A3	20030924		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PT 896533	T	20040227	PT 1997-907843	19970222
ES 2205183	T3	20040501	ES 1997-907843	19970222
US 6121304	A	20000919	US 1999-227216	19990106
US 6316484	B1	20011113	US 2000-633740	20000807
US 2002143036	A1	20021003	US 2001-972743	20011005
PRIORITY APPLN. INFO.:				
			US 1996-605431	B2 19960222
			EP 1997-907843	A3 19970222
			US 1997-896827	A1 19970718
			US 1999-227216	A1 19990106
			US 2000-633740	A1 20000807

OTHER SOURCE(S):

GI

MARPAT 130:223060



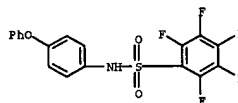
1

AB The title compds. [I; Y = SO, SO₂; Z = NR₁R₂ (wherein R₁ = H, (un)substituted C1-10 alkyl, C3-6 alkenyl, C2-6 heteroalkyl; R₂ = (un)substituted Ph)], useful as pharmacol. agents in the treatment of disease states, particularly atherosclerosis, pancreatitis, hypercholesterolemia, and hyperlipoproteinemia or as lead compds. for the development of such agents, were prepared. Thus, reaction of N,N-dimethyl-1,4-phenyldiamine·2HCl with pentafluorophenylsulfonyl chloride in pyridine afforded 63% I [Y = SO₂; Z = 4-(Me₂N)C₆H₄NH] which showed EC₅₀ of 0.5 μM for their ability to increase LDL receptor expression in Hep G2 cells.
195534-14-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SYN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pentafluorobenzenesulfonamides for treating atherosclerosis)

L12 ANSWER 7 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

RN 195534-14-6 CA

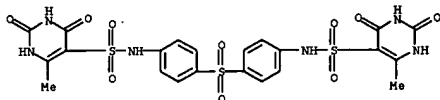
CH Benzenesulfonamide, 2,3,4,5,6-pentafluoro-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/810,325

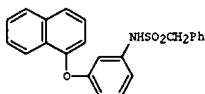
L12 ANSWER 8 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 130129309 CA
 TITLE: Identification and monitoring of the quality of diucifone and its intermediate by 1H NMR method
 AUTHOR(S): Vishnevskii, O. V.; Volovenko, Yu. M.; Kudryavtsev, A. A.; Ovrutskii, V. M.
 CORPORATE SOURCE: Inst. Farmakol. Toksikol., AMN Ukr., Kiev, Ukraine
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1998), 32(8), 55-56
 CODEN: KHFZAN; ISSN: 0023-1134
 PUBLISHER: Izdatel'stvo Folium
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The mol. structures of diucifone and its semiproduct 6-methyluracil-5-sulfochloride are confirmed by 1H NMR. It was demonstrated that the method could be used to control purity of the drug.
 IT 34941-71-4, Diucifone
 RL: ANT (Analyte); ANST (Analytical study)
 (identification and monitoring of the quality of diucifone and its intermediate by 1H NMR method)
 RN 34941-71-4 CA
 CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis(1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (SCI) (CA INDEX NAME)



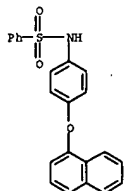
L12 ANSWER 9 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 12912764 CA
 TITLE: Preparation of arylsulfonamides and related compounds as cannabinoid CB1 and CB2 receptor agonists.
 INVENTOR(S): Mittendorf, Joachim; Dressel, Juergen; Matzke, Michael; Keldenich, Joerg; Mohrs, Klaus-Helmut; Raddatz, Siegfried; Franz, Juergen; Spreyer, Peter; Voehringer, Verena; Schuhmacher, Joachim; Rock, Michael-Harold; Horvath, Ervin; Friedel, Arno; Mauler, Frank; De Vry, Jean; Jork, Reinhard
 PATENT ASSIGNEE(S): Bayer A.-G., Germany
 SOURCE: Ger. Offen. 194 pp.
 CODEN: GWXKEX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19740785	A1	19980827	DE 1997-19740785	19970917 <--
CA 2281929	AA	19980827	CA 1998-2281929	19980210 <--
CA 2470183	AA	19980827	CA 1998-2470183	19980210 <--
WO 9837061	A1	19980827	WO 1998-EP716	19980210 <--
W: AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GU, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, BG, BR, BU, CA, CH, CN, CU, DE, DK, EE, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9863965	A1	19980909	AU 1998-63965	19980210 <--
AU 735137	B2	20010705		
EP 966436	A1	19991229	EP 1998-909427	19980210 <--
EP 966436	B1	20021211		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI				
TR 9902012	T2	20000121	TR 1999-9902012	19980210
BR 9807848	A	20000321	BR 1998-7848	19980210
JP 2001515470	T2	20010918	JP 1998-536215	19980210
AT 229502	E	20021215	AT 1998-909427	19980210
PT 966436	T	20030331	PT 1998-909427	19980210
RU 2203272	C2	20030427	RU 1999-120092	19980210
ES 2189142	T3	20030701	ES 1998-909427	19980210
IL 131010	A1	20040328	IL 1998-131010	19980210
TW 527343	B	20030411	TW 1998-87102305	19980219
ZA 9801419	A	19980824	ZA 1998-1419	19980220 <--
BG 63915	B1	20030630	BG 1999-103646	19990810
NO 9904014	A	19991012	NO 1999-4014	19990819 <--
NO 314141	B1	20030203		
MX 9907687	A	20000531	MX 1999-7687	19990819
US 6262112	B1	20010717	US 1999-367456	19991115
US 2002072529	A1	20020613	US 2001-878392	20010611
US 6573278	B2	20030603		
PRIORITY APPL. INFO.:				
			DE 1997-19706902	A1 19970221
			DE 1997-19740785	A 19970917

L12 ANSWER 9 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
 CA 1998-2281929 A3 19980210
 WO 1998-EP716 W 19980210
 US 1999-367456 A3 19991115
 OTHER SOURCE(S): MARPAT 129:202764
 GI



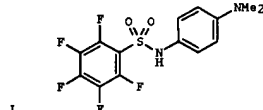
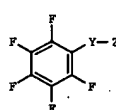
AB R1ADEGLR [R1 = aryl, quinolyl, isoquinolyl, etc.; A, E = bond, alkylene; D = O, S, SO, SO2, imino; G = (substituted) (hetero)arylene; L = O, NH, N(OH)SO2, NHSO, NHSO2, etc.; R = (substituted) alkyl, alkenyl, alkynyl, aryl, heterocyclyl, morpholinyl, cycloalkyl, etc.], were prepared. Thus, title compound (I) showed IC50 = 0.9 nM/L in a rat CB1 receptor luciferase screen.
 IT 212187-61-6P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of arylsulfonamides and related compds. as CB1 and CB2 receptor agonists)
 RN 212187-61-6 CA
 CN Benzenesulfonamide, N-[4-(1-naphthalenyloxy)phenyl]- (SCI) (CA INDEX NAME)



L12 ANSWER 10 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 128167254 CA
 TITLE: Pentafluorobenzenesulfonamides and analogs useful as antiproliferative agents
 INVENTOR(S): Flygare, John; Medina, Julio; Shan, Bei; Clark, David; Rosen, Terry
 PATENT ASSIGNEE(S): Tularik, Inc., USA
 SOURCE: PCT Int. Appl., 101 pp.
 CODEN: PIXKX2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

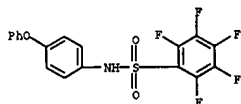
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9805315	A1	19980212	WO 1997-US12720	19970718 <--
W: AL, AM, AT, AU, AZ, BA, BE, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, BG, BR, BU, CA, CH, CN, CU, DE, DK, EE, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2260777	AA	19980212	CA 1997-2260777	19970718 <--
AU 9738877	A1	19980225	AU 1997-38877	19970718 <--
AU 710173	B2	19990916		
CN 1225009	A	19990804	CN 1997-196427	19970718 <--
EP 939627	A1	19990908	EP 1997-936133	19970718 <--
EP 939627	B1	20030910		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9710737	A	20000111	BR 1997-10737	19970718
JP 2000515545	T2	20001121	JP 1998-507937	19970718
JP 3421350	B2	20030630		
US 6482860	B1	20021119	US 1997-896280	19970718
AT 249214	E	20030915	AT 1997-936133	19970718
PT 939627	T	20040227	PT 1997-936133	19970718
ES 2201313	T3	20040316	ES 1997-936133	19970718
KR 2000022556	A	20000425	KR 1998-711004	19981230
HK 1021699	A1	20001107	HK 2000-100662	20000203
US 2003162817	A1	20030828	US 2002-270259	20021011
PRIORITY APPL. INFO.:				
			US 1996-22198P	P 19960719
			US 1997-896280	A1 19970718
			WO 1997-US12720	W 19970718

OTHER SOURCE(S): MARPAT 128:167254
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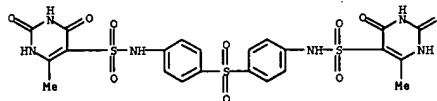
II

L12 ANSWER 10 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
 AB The invention provides methods and compounds relating to novel pentafluorophenylsulfonamide derivs. and analogs, and their use as pharmacol. active agents. The compds. bond covalently and selectively to Cys-239 of β -tubulin, and thereby disrupt microtubule formation. The compds. find particular use in the treatment of cancer, vascular restenosis, microbial infections, and psoriasis, or the compds. serve as leads for the development of drugs. The compds. include compds. of formula I [Y = S(O) or S(O)₂; Z = NR₁R₂ or OR₃; R₁, R₂ = H, (un)substituted alk(en)yl, alkoxy, cycloalk(en)yl, (hetero)aryl, (hetero)aryloxy, etc.; R₁ and R₂ may be joined by a bond, alkylene, or heteroalkylene group; R₃ = (un)substituted (hetero)aryl]. For example, sulfonamidation of N,N-dimethyl-1,4-phenylenediamine-2HCl with pentafluorophenylsulfonyl chloride in pyridine gave 634 title compound II. In an assay for inhibition of growth of HeLa cells (human cervical carcinoma) in vitro, II had an IC₅₀ of < 0.05 μ M.
 IT 195534-14-6P, 1-[(Pentafluorophenyl)sulfonamido]-4-phenoxybenzene
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of pentafluorobenzene-sulfonamides and analogs as antiproliferative and chemotherapeutic agents)
 RN 195534-14-6 CA
 CN Benzenesulfonamide, 2,3,4,5,6-pentafluoro-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

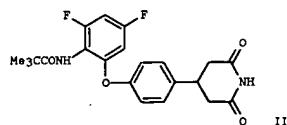
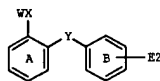
L12 ANSWER 11 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 124:352867 CA
 TITLE: Identification and spectrophotometric determination of the drug Diutsifon
 AUTHOR(S): Nuzhnova, N. I.; Litvinenko, A. V.
 CORPORATE SOURCE: Kazan. Gos. Univ., Kazan, Russia
 SOURCE: Farmatsiya (Moscow) (1995), 44(6), 15-18
 CODEN: FRMTAL; ISSN: 0367-3014
 PUBLISHER: Rts "Farminfo"
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 AB The authors have developed procedures for identifying Diutsifon which are based on the functional qual. anal. of the agent from reactions with calcium chloride (test for a hydroxypyrimidinyl sulfamide group), with N-dimethylaminobenzaldehyde (test for a diaminodiphenylsulfone fragment), and with sodium nitrite in DMPA medium (test for hydroxypyrimidinylsulfonic acid residue). The developed procedures have been used for identification of Diutsifon in powder.
 IT 34941-71-4, Diutsifon
 RL: ANT (Analyte); ANST (Analytical study)
 (identification and spectrophotometric determination of the drug Diutsifon in pharmaceutical powders)
 RN 34941-71-4 CA
 CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 12 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 123:143447 CA
 TITLE: Preparation of anti-atherosclerotic diaryl compounds
 INVENTOR(S): Arrowsmith, Richard James; Dann, John Gordon; Franzmann, Karl Witold; Hodgson, Simon Teanby; Waters, Peter John
 PATENT ASSIGNEE(S): Wellcome Foundation Ltd., UK
 SOURCE: PCT Int. Appl., 60 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

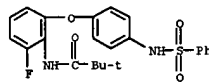
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9501326	A1	19950112	WO 1994-GB1409	19940629 <--
W: AU, CA, CN, CZ, FI, GE, HU, JP, KE, KR, KZ, LV, MW, NO, NZ, PL, RU, SD, SI, SK, UA, US, UZ				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2166413	AA	19950112	CA 1994-2166413	19940629 <--
AU 9470060	A1	19950124	AU 1994-70060	19940629 <--
ZA 9404688	A	19951229	ZA 1994-4688	19940629 <--
EP 706508	A1	19960417	EP 1994-918970	19940629 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
HU 73813	A2	19960930	HU 1995-1813	19940629 <--
JP 08512046	T2	19961217	JP 1994-503357	19940629 <--
US 5776951	A	19980707	US 1996-564281	19960411 <--
US 6043284	A	20000328	US 1998-18936	19980205
PRIORITY APPLN. INFO.:			GB 1993-13459	A 19930630
			GB 1994-6005	A 19940325
			WO 1994-GB1409	W 19940629

OTHER SOURCE(S): MARPAT 123:143447
 GI



AB Title compds. I (W = H, (substituted)C1-12 hydrocarbyl; X = NR1CONR2, NR1CO, NR1CO2, CONR2, C2CONR2 wherein R1, R2 H, C1-4 alkyl, halo-C1-4 alkyl; Y = bond, C2-4 alkenylene, C1-4 alkylene, etc.; Z = bond, C1-4

L12 ANSWER 12 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
 alkylene, O2C,, CO2, SO2NR3, etc. wherein R3 = H, C1-4 alkyl, halo-C1-4 alkyl; Z = aliph. ring system, C1-8 alkyl, etc; ring A, B are optionally substituted) or a salt thereof, are prepd. 4-(Benzyloxy)benzaldehyde, Et acetate and piperidine were reacted to give 3-[(4-benzyloxy)phenyl]glutaric acid which in 4 steps was converted to 2,4-difluoro-6-[4-(2,6-dioxo-4-piperidinyl)phenoxy]-5-aminobenzene to which in THF was added Et3N and pivaloyl chloride to give the title compd. II. The antiatherosclerotic activity was demonstrated by inhibition of cholesterol acyltransferase for which the IC₅₀ of some I and II was <10 μ M. Pharmaceutical formulations comprising I are given.
 IT 165118-82-1P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of anti-atherosclerotic diaryl compds.)
 RN 165118-82-1 CA
 CN Propanamide, N-[2-fluoro-6-[4-[(phenylsulfonyl)amino]phenoxy]phenyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

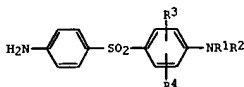


10/810,325

L12 ANSWER 13 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 117:26077 CA
 TITLE: Anti-bacterial compositions comprising a substituted bis(4-aminophenyl) sulfone and a dihydrofolic acid reductase
 INVENTOR(S): Seydel, Joachim K.; Pieper, Helmut; Kruger, Gerd; Noll, Klaus; Keck, Johannes; Lechner, Uwe
 PATENT ASSIGNEE(S): Thomae, Dr. Karl, G.m.b.H., Germany
 SOURCE: U.S., 15 pp. Cont.-in-part of U.S. 4,992,430.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5084449	A	19920128	US 1990-623833	19901207 <--
DE 3419009	A1	19851128	DE 1984-3419009	19840522 <--
US 4829058	A	19890509	US 1987-62291	19870615 <--
US 4992430	A	19910212	US 1989-302158	19890126 <--
PRIORITY APPL. INFO.:			DE 1984-3419009	A 19840522
			US 1985-732024	B1 19850508
			US 1987-62291	A3 19870615
			US 1989-302158	A2 19890126

OTHER SOURCE(S): MARPAT 117:26077
 GI



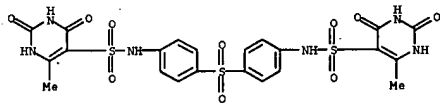
AB Title sulfones I [R1 = H, alkyl, cycloalkyl; R2 = H, C1-3 alkyl; R3 = cyano, (bis)-C1-3 alkylaminocarbonyl, C3-7-N-cycloalkyl-C1-3 alkylaminocarbonyl, alkylaminosulfonyl, HO, hydroxycarbonyl, halo, F3C, O2N, H2O, etc.; R4 = H, halo, HO, C1-3 alkoxy] or salts thereof, and pharmaceuticals comprising I and optionally cycloguanil or proguanil or other dihydrofolic acid reductase inhibitors, are prepared
 4'-acetamido-4-amino-2-chlorodiphenyl sulfone were reacted and kept at ambient temperature for 3 h to give the tosyl derivative, which with K2CO3 was suspended and reacted with EtI at 90° for 24 h to give, after acid hydrolysis, I (R1 = R4 = H, R2 = Et, R3 = 2-Cl) (II). In a test for inhibiting 7,8-dihydropteroic acid synthesis of plasmodia, the i50 value of II was 2.10 µM vs. Dapsone and Fansil 12.41 and 200, resp. Pharmaceutical formulations, comprising I alone and with dihydrofolic acid reductase inhibitors, are given.
 IT 101513-43-3P
 RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as intermediate for antibacterials)

L12 ANSWER 14 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 115:187677 CA
 TITLE: Development of novel antiviral agents on the basis of the inhibition of pathological processes in the infection of target organs
 AUTHOR(S): Pozdeev, O. K.; Gil'manova, G. Kh.; Korobkova, V. D.; Andreev, S. V.
 CORPORATE SOURCE: Inst. Org. Fiz. Khim. im. Arbusova, Kazan, USSR
 SOURCE: Nov. Pechody Khimioter. Virusn. Infeks. (1991), 148-53. Editor(s): Kukain, R. A.
 Zinatne; Riga, USSR.
 CODEN: 57SRAH
 DOCUMENT TYPE: Conference
 LANGUAGE: Russian
 AB Pulmonary aerosol administration of immunostimulants (diutsifon and an unspecified sulfonic acid derivative) to mice infected with influenza A virus

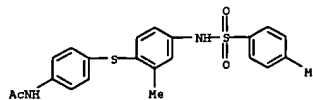
increased the levels of influenza-sp. IgM in the respiratory tract. Immunol. aspects of virus infection are discussed and pharmacol. methods for activating immune defenses in target organs (e.g., the lungs) are discussed.

IT 34941-71-4, Diutsifon
 RL: BIOL (Biological study) (immunostimulant and virucidal activity of, after pulmonary administration of aerosol, in influenza A infection)

RN 34941-71-4 CA
 CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)]

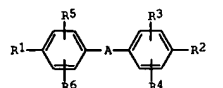


L12 ANSWER 13 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)
 RN 101513-43-3 CA
 CN Acetamide, N-[4-[[[2-methyl-4-[[[4-methylphenyl)sulfonyl]amino]phenyl]thio]phenyl]- (9CI) (CA INDEX NAME)



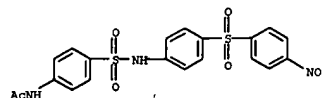
L12 ANSWER 15 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 115:114130 CA
 TITLE: Preparation of biphenyl compounds as drugs
 PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 68 pp.
 CODEN: JIKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03056431	A2	19910312	JP 1990-167430	19900625 <--
PRIORITY APPL. INFO.:			GB 1989-14660	A 19890626
OTHER SOURCE(S):			MARPAT 115:114130	
GI				



AB Biphenyl compds. [I; A = CH(OH), CH2, CO, COCH(OH), COCO, CONH, O, S, SO, etc.; R1 = halo, NH2, protected NH2, hydrazino, etc.; R2 = halo, (alkyl)amino, protected NH2, hydrazino, etc.; R3 = H, alkyl, halo, cyano, etc.; R4 = H, alkyl; R5, R6 = H, alkyl, halo], useful as analgesics, antiinflammatory agents, etc., are prepared. Stirring a mixture of (4-H2NCGH4)2CO and MeONH2.HCl in MeOH at room temperature gave 77.0% (4-H2NCGH4)C(=O)Me, which reduced carageenan-induced edema by 50% at 100 mg/kg orally in rats and controlled nephritis by 83% at 100 mg/kg orally in mice. Also prepared and tested as analgesics, antirheumatics, and blood platelet promoters were 101 adnl. I.
 IT 60515-93-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reaction of, in preparation of biphenyl drugs)

RN 60515-93-7 CA
 CN Acetamide, N-[4-[[[4-[[[4-nitrophenyl)sulfonyl]phenyl]amino]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

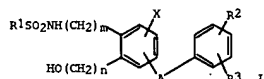


10/810,325

L12 ANSWER 16 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 113:58711 CA
 TITLE: Preparation of N-(phenylalkyl)alkane- or
 -benzenesulfonamides as pharmaceuticals
 INVENTOR(S): Hashimoto, Kinji; Inoue, Makoto; Goto, Kyoto; Kanai,
 Kenichi
 PATENT ASSIGNEE(S): Otsuka Pharmaceutical Factory, Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
 CODEN: JKKKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02072150	A2	19900312	JP 1988-223880	19880906 <--
JP 05067619	B4	19930927		
PRIORITY APPLN. INFO.: MARPAT 113:58711			JP 1988-223880	19880906
OTHER SOURCE(S): GI				



AB The title compds. (I; R1 = alkyl, Ph; m, n = 0-6; A = S, NH, bond, SO, SO2, alkylene, NCHO, O, CO; X = H, halo; R2 = H, halo, alkyl, alkoxy, NH2, OH, acylamino, alkoxy-carbonyl, CO2H; R3 = H, halo, alkyl) useful as antiinflammatories, antirheumatics, antiasthmatics, allergy inhibitors, antipyretics, analgesics, antithrombotics, blood platelet aggregation inhibitors, etc. (no data), are prepared. Thus, a solution of MeSO2C1 in CH2Cl2 was added dropwise under ice-cooling to a mixture of 2-amino-4-(4-methylphenylthio)phenol-HCl (preparation given), pyridine, and CH2Cl2 and the mixture was stirred 2.5 h to give N-[2-hydroxy-5-(4-methylthio)phenyl]methanesulfonamide. A total of 38 I were prepared.

IT 128236-64-6P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of, as drug)

RN 128236-64-6 CA
 CN Benzenesulfonamide, N-[2-hydroxy-4-(phenylthio)phenyl]- (9CI) (CA INDEX NAME)

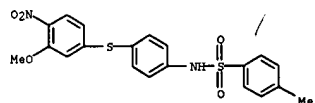
L12 ANSWER 17 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 111:224808 CA
 TITLE: Studies on 2,3,N,N'-substituted 4,4'-diaminodiphenylsulfones as potential antimalarial agents
 AUTHOR(S): Saxena, M.; Saxena, A. K.; Raina, R.; Chandra, S.; Sen, A. B.; Anand, N.; Seydel, J. K.; Wiese, M.
 CORPORATE SOURCE: Cent. Drug Res. Inst., Lucknow, India
 SOURCE: Arzneimittel-Forschung (1989), 39(5), 1081-4
 CODEN: ARZNAD; ISSN: 0004-4172
 DOCUMENT TYPE: Journal
 LANGUAGE: English

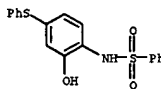
AB A series of new 4,4'-diaminodiphenylsulfones (I) substituted at the 2 and 3 position and also at the primary amino group of the Ph rings were synthesized and evaluated for their antimalarial activity against Plasmodium berghei infection in mice. Some of these compds. were active and showed complete inhibition of parasitemia which included I at 1 mg/kg i.p. for 4 days and I at 0.3 mg/kg for 4 days. Some compds. tested for their synthetase inhibitory action in a cell-free system isolated from P. berthei were more active than diaminodiphenylsulfone. The difference in order of activity between these in vivo and in vitro tests may be due to differences in their pharmacokinetic properties.

IT 102003-38-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and alkylation of)

RN 102003-38-3 CA
 CN Benzenesulfonamide, N-[4-[(3-methoxy-4-nitrophenyl)thio]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

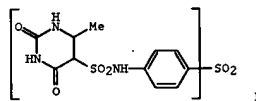


L12 ANSWER 16 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



L12 ANSWER 18 OF 41 CA COPYRIGHT 2005 ACS on STN

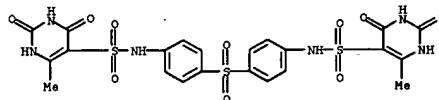
ACCESSION NUMBER: 110:237221 CA
 TITLE: Polarographic determination of diutsifon
 AUTHOR(S): Budnikov, G. K.; Kargina, O. Yu.; Lapshina, S. V.
 CORPORATE SOURCE: Kazan. Gos. Univ., Kazan, USSR
 SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1989), 23(3), 347-9
 CODEN: KHFZAN; ISSN: 0023-1134
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian
 GI



AB Diutsifon (I) was determined in tablets by a polarog. method. A linear relation between the reduction current and the drug concentration was observed in the range 8 + 10-6-10-2M. The method is also suitable for determining methyluracil as an impurity. The electrochem. behavior of I is discussed.

IT 34941-71-4, Diutsifon
 RL: ANST (Analytical study)
 (determination of impurity and, in tablets, polarog.)

RN 34941-71-4 CA
 CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



10/810,325

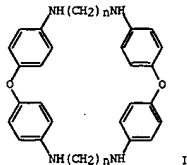
L12 ANSWER 19 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:110:8187 CA
Interactions between water-soluble polyparacyclophanes
and drugs (I). Design and synthesis of
water-soluble polyparacyclophanes containing diphenyl
ether skeletonsAUTHOR(S):
CORPORATE SOURCE:Chun, In Koo; Lee, Min Hwa; Kim, Shin Keun
Dep. Pharm., Dongduk Women's Univ., Seoul, 136-130,
S. Korea

SOURCE:

Yakche Hakhoechi (1988), 18(2), 89-97
CODEN: YAHAEK; ISSN: 0259-2347DOCUMENT TYPE:
LANGUAGE:Journal
Korean

GI

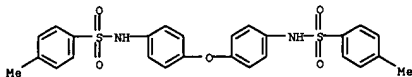


AB Water-soluble paracyclophanes (I, n = 3-6) were prepared for developing host
comps. which might provide an efficient hydrophobic field. The preparation
method consisted of tosylation of 4,4'-diaminodiphenyl ether, alkylation
of the resulting tosylates with Br(CH₂)_nBr (n = 3-6) followed by
detosylation with 47% HBr in phenol. In addition the corresponding
acyclic analog (p-MeNHCGH₄)₂O was prepared from the above tosylate by
alkylation with MeI in the presence of K₂CO₃ in DMF followed by
detosylation with 47% HBr in phenol.

IT 117964-11-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and alkylation of)

RN 117964-11-1 CA

CN Benzenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[4-methyl- (9CI) (CA
INDEX NAME)

L12 ANSWER 20 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:109:110271 CA
Substituted N-phenylsulfonamides, their preparation,
pharmaceuticals containing them, and their use
as enzymatic reaction and thrombocyte aggregation
inhibitors

INVENTOR(S):

Mohr, Klaus; Perzborn, Elisabeth; Seuter, Friedel;
Fruchtmann, Roman; Kohlsdorfer, Christian
Bayer A.-G., Fed. Rep. Ger.

PATENT ASSIGNEE(S):

SOURCE:

Ger. Offen. 52 pp.

DOCUMENT TYPE:

CODEN: GWKXEX

LANGUAGE:

Patent

FAMILY ACC. NUM. COUNT: 1

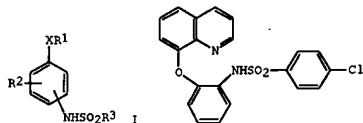
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3632329	A1	19880331	DE 1986-3632329	19860924 <--
EP 261539	A2	19880330	EP 1987-113393	19870914 <--
EP 261539	A3	19881019		
EP 261539	B1	19910306		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
AT 61357	E	19910315	AT 1987-113393	19870914 <--
JP 63093765	A2	19880425	JP 1987-237563	19870924 <--
US 5093340	A	19920303	US 1990-587594	19900924 <--
US 5070096	A	19911203	US 1990-614329	19901115 <--
US 5202336	A	19930413	US 1991-729020	19910712 <--
PRIORITY APPL. INFO.:				
DE 1986-3632329 A 19860924				
US 1987-94239 B1 19870908				
EP 1987-113393 A 19870914				
US 1989-294958 B2 19890106				
US 1989-402934 B1 19890905				
US 1990-587594 A3 19900924				
US 1990-614329 A3 19901115				

OTHER SOURCE(S):

CASREACT 109:110271; MARPAT 109:110271

GI



AB The title compds. I [R1 = (un)substituted pyridyl, quinolyl, or
isoquinolyl; R2 = H, cyano, NO₂, halo, (halo)alkyl, (halo)alkoxy,
alkoxycarbonyl; R3 = (un)substituted aryl, C₆F₅, (un)substituted
(cyclo)alkyl; X = O, AB, BA; A = O, NMe, CH₂CH₂NMe; B = CH₂, CHMe; R1
= pyridyl when X = O] and their salts, useful as lipoxigenase
inhibitors, thrombocyte aggregation inhibitors, inflammation inhibitors,
and enzymatic reaction inhibitors, were prepared 8-Hydroxyquinoline and K₂CO₃
in DMF was treated with 2-FCG4NO₂ in DMF 15 h at 25° to give 824
8-(2-nitrophenoxy)quinoline which reacted with N₂H₄·H₂O in refluxing MeOH
containing 10% Pd/C in 2 h to give 69% 8-(2-aminophenoxy)quinoline. This

was

L12 ANSWER 19 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

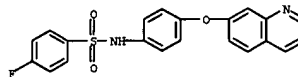
L12 ANSWER 20 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

acylated with 4-ClC₆H₄SO₂Cl in CH₂Cl₂ at 25°; after 1 h pyridine
was added and the mixt. stirred 15 h at 25° to give 94% sulfonamide
II. Thrombocyte aggregation inhibition occurred at a limiting concn. of
0.3-0.1 µg/mL II. N-[4-(4-Methyl-8-quinolinyloxy)phenyl]-4-
chlorobenzenesulfonamide, at 2 mg/ear topically, gave 58% inhibition of
mouse ear inflammation. N-[4-(7-Quinolinyloxy)phenyl]-4-
fluorobenzenesulfonamide had IC₅₀ of 3.3 + 10-8 g/mL for
lipoxigenase inhibition.

IT 116253-12-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as pharmaceutical)

RN 116253-12-4 CA

CN Benzenesulfonamide, 4-fluoro-N-[4-(7-quinolinyloxy)phenyl]- (9CI) (CA
INDEX NAME)

10/810,325

L12 ANSWER 21 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

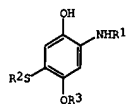
LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62108859	A2	19870520	JF 1985-250197	19851107 <--
JP 04025947	B4	19920506		
PRIORITY APPLN. INFO.:			JF 1985-250197	19851107

G1



AB The title compds. [I; R1 = H, alkyl, (Ph)alkyl, alkylcarbonyl, Ph- or alkylsulfonyl, benzoyl, (benzoyl)aminothiocarbonyl, (substituted) thiazolyl; R2 = alkyl, Ph(alkyl); R3 = alkyl, (Ph)alkyl, carboxyalkyl], useful as antiinflammatories, antiallergics, antirheumatics, analgesics, diuretics, anticoagulants, and hypotensives (no data), are prepared

NItration of 10 g 2,4-(PhS)(MeO)C6H3OMe gave 9.5 g 2,4,5-(O2N)(MeO)(PhS)C6H2OMe, which (6 g) was treated with BBr3 at -20° to afford 5 g 2,4,5-(O2N)(MeO)(PhS)C6H2OH. The nitrophenol (1.6 g) was reduced to give 1.3 g I (R1 = H, R2 = Ph, R3 = Me) isolated as its HCl salt.

IT 110624-62-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as drug)

RN 110624-62-9 CA

CN Benzenesulfonamide, N-[2-hydroxy-5-methoxy-4-(phenylthio)phenyl]- (9CI)
(CA INDEX NAME)

L12 ANSWER 22 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

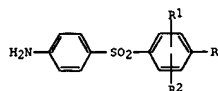
LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

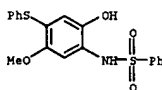
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3419009	A1	19851128	DE 1984-3419009	19840522 <--
EP 165422	A1	19851227	EP 1985-105478	19850506 <--
EP 165422	B1	19880309		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 32888	E	19880315	AT 1985-105478	19850506 <--
CA 1315287	A1	19930330	CA 1985-481752	19850517 <--
DK 8502232	A	19851123	DK 1985-2232	19850520 <--
FI 8501996	A	19851126	FI 1985-1996	19850520 <--
ES 543282	A1	19860601	ES 1985-543282	19850520 <--
IL 75238	A1	19890228	IL 1985-75238	19850520 <--
NO 8502026	A	19851125	NO 1985-2026	19850521 <--
NO 160995	B	19890313		
NO 160995	C	19890621		
JP 60255760	A2	19851217	JP 1985-109199	19850521 <--
JP 05037420	B4	19930603		
ZA 8503821	A	19870128	ZA 1985-3821	19850521 <--
AU 8542768	A1	19851128	AU 1985-42768	19850522 <--
AU 572660	B2	19880512		
ES 551832	A1	19870101	ES 1986-551832	19860211 <--
ES 551833	A1	19870101	ES 1986-551833	19860211 <--
ES 551834	A1	19870101	ES 1986-551834	19860211 <--
US 4829058	A	19890509	US 1987-62291	19870615 <--
US 4992430	A	19910212	US 1989-302158	19890126 <--
US 5084449	A	19920128	US 1990-623833	19901207 <--
PRIORITY APPLN. INFO.:			DE 1984-3419009	A 19840522
			EP 1985-105478	A 19850506
			US 1985-732024	A1 19850508
			US 1987-62291	A3 19870615
			US 1989-302158	A2 19890126

G1



AB The title compds. I (R = NH2, alkylamino, dialkylamino; R1 = cyano,

L12 ANSWER 21 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



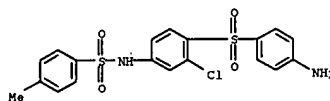
L12 ANSWER 22 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

alkylaminocarbonyl, alkylamino, hydroxyalkyl, etc.; R2 = H, halo, OH, alkoxy, etc.) are prepd. by several methods as drugs for the treatment of malaria and leprosy (formulations given). Thus, I (R = NHMe, R1 = 2-Me, R2 = H) (II) was prepd. by refluxing 4'-acetamino-2-methyl-4-(N-methyltosylamino)diphenyl sulfone (prepd. by methylation of the 4-tosylamino deriv. with MeI) with HBr in the presence of PhOH. II inhibited synthesis of 7,8-dihydropteroic acid by Plasmodium berghei in vitro.

IT 101513-49-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(isopropylation of)

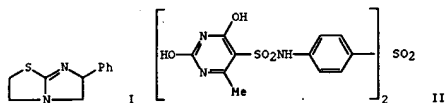
RN 101513-49-9 CA

CN Benzenesulfonamide, N-[4-[(4-aminophenyl)sulfonyl]-3-chlorophenyl]-4-methyl- (9CI) (CA INDEX NAME)



10/810,325

L12 ANSWER 23 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:101:32874 CA
Efficacy of therapy with antibacterial drugs
in combination with levamisole and diutsifon in
experimental degenerative tuberculosis of the lungs
Khomenko, A. G.; Erokhin, V. V.; Insanov, A. B.;
El'shanskaya, M. P.; Golyshevskaya, V. I.;
Goloshchapov, N. M.CORPORATE SOURCE:
SOURCE:Tsentr. NII Tuberk., Moscow, USSR
Problemy Tuberkuleza (1984), (4), 55-9
CODEN: PRUAX; ISSN: 0032-9533DOCUMENT TYPE:
LANGUAGE:
GIJournal
Russian

II

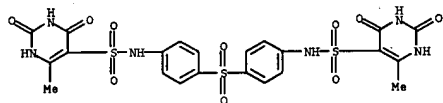
AB The efficacy of therapy of degenerative tuberculosis of the lungs with chemotherapeutic drugs in combination with immunostimulants was studied on the basis of morphol. investigations on rabbits. It was shown that the use of levamisole (I) [14769-73-4] and diutsifon (II) [34941-71-4] in addition to antibacterial drugs at the phase of disease stabilization promoted healing of the degenerative tuberculosis by converting the caverns into cyst-like cavities, formation of tuberculomas, encapsulated caseous foci, and calcinates. Lymphocytes, macrophages and polynuclear cells actively participated in the reparative reactions. Diutsifon was capable of correcting the adverse effects of prednisolone on extended destructive tuberculosis by preventing rapid progress of the disease.

IT 34941-71-4

RL: BIOL (Biological study)
(tuberculostatic activity of antibiotics and)

RN 34941-71-4 CA

CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 24 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:98:166932 CA
Determination of surfactant concentration needed for
wetting of hydrophobic drugs by critical
wetting concentrations

AUTHOR(S):

CORPORATE SOURCE:
SOURCE:Bondarenko, A. I.
Beloruss. Inst. Usoversh. Vrachei, Minsk, USSR
Farmatsiya (Moscow, Russian Federation) (1983)
, 32 (1), 29-31
CODEN: FMTAL; ISSN: 0367-3014DOCUMENT TYPE:
LANGUAGE:Journal
Russian

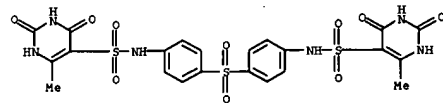
AB The wettability of Tween 80 [9005-65-6] varied with the type of pharmaceutical and the time of wetting (in min) vs. the surfactant concentration and was represented by a hyperbolic curve. For hydrophilization of diutsifon [34941-71-4] and salazodimethoxine [40016-88-4] the wetting concentration of Tween 80 was .apprx.0.04% and .apprx.0.05%, resp., whereas for other sulfonamides the concentration of the surfactant required for wetting was much higher. For sulfadimazine [57-68-1], salazopyridazine [22933-72-8], and ethazole [94-19-9], the concns. were .apprx.0.09%, .apprx.0.1%, and .apprx.0.1%, resp. For xeroform [5175-83-7] 1.3% surfactant was required.

IT 34941-71-4

RL: FRP (Properties)
(wettability of, Tween 80 effect on)

RN 34941-71-4 CA

CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 23 OF 41 CA COPYRIGHT 2005 ACS on STN

(Continued)

ACCESSION NUMBER:
TITLE:92:41976 CA
Pharmaceutical composition based on
bis[p-(2,4-dioxo-6-methylpyrimidinyl-5-sulfonamido)phenyl] sulfone for treating rheumatoid
collagenosis
Goloshchapov, N. M.; Sigidin, Ya. A.; Tsvetkova, E. S.; Bilich, I. L.; Reznik, V. S.; Fashkurov, N. G.;
Zaika, G. F.; Muslinkin, A. A.

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

GI

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

FR 2408348

A1

19790608

FR 1977-31896

19771024 <-

FR 2408348

B1

19800627

FR 1977-31896

A

19771024

PRIORITY APPLN. INFO.:

GI

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

FR 2408348

A1

19790608

FR 1977-31896

19771024 <-

FR 2408348

B1

19800627

FR 1977-31896

A

19771024

PRIORITY APPLN. INFO.:

GI

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

FR 2408348

A1

19790608

FR 1977-31896

19771024 <-

FR 2408348

B1

19800627

FR 1977-31896

A

19771024

PRIORITY APPLN. INFO.:

GI

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

FR 2408348

A1

19790608

FR 1977-31896

19771024 <-

FR 2408348

B1

19800627

FR 1977-31896

A

19771024

PRIORITY APPLN. INFO.:

GI

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

FR 2408348

A1

19790608

FR 1977-31896

19771024 <-

FR 2408348

B1

19800627

FR 1977-31896

A

19771024

PRIORITY APPLN. INFO.:

GI

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

FR 2408348

A1

19790608

FR 1977-31896

19771024 <-

FR 2408348

B1

19800627

FR 1977-31896

A

19771024

PRIORITY APPLN. INFO.:

GI

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

FR 2408348

A1

19790608

FR 1977-31896

19771024 <-

FR 2408348

B1

19800627

FR 1977-31896

A

19771024

10/810,325

L12 ANSWER 26 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

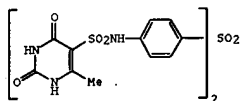
DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4151281	A	19790424	US 1977-843818	19771020 <--
PRIORITY APPLN. INFO.:				
GI				



AB Pharmaceuticals containing I [34941-71-4] are used for the treatment of various collagenoses, such as rheumatoid arthritis, systemic scleroderma, etc. I exhibits low toxicity (LD50 2600 mg/kg intragastrally to mice) and low side effects. In clin. tests 59 out of 69 patients exhibited abatement of the severity and duration of morning torpidity after oral administration of 0.1-0.2 g doses of I. The pain syndrome tangibly abated towards the end of the 1st wk of treatment and in 51 patients it disappeared on the 10th-12th day. I was prepared by chlorosulfonation of 6-methyluracil [626-48-2] and treatment of 6-methyluracil-5-sulfonyl chloride [6461-30-9] with (4-HZNCGH4)2SO2 [80-08-0].

IT 34941-71-4P

RL: PREP (Preparation)

(preparation of, for collagen disease and arthritis treatment)

RN 34941-71-4 CA

CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)

L12 ANSWER 27 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

TITLE:

INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
SU 459228	T	19750205	SU 1971-1670131	19710701 <--
PRIORITY APPLN. INFO.:				
GI For diagram(s), see printed CA Issue.				

AB P,p'-bis[(2,4-dihydroxy-6-methyl-5-pyrimidinyl)sulfonamino]diphenyl sulfone (I) [34941-71-4] is used for treatment of leprosy.

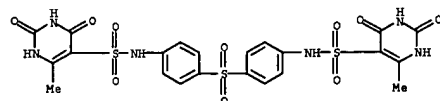
IT 34941-71-4

RL: BIOL (Biological study)

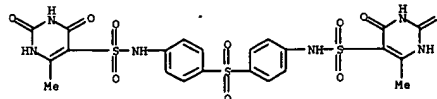
(leprosy treatment with)

RN 34941-71-4 CA

CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



L12 ANSWER 26 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)



L12 ANSWER 28 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

TITLE:

Synthesis of new substituted N-(β-hydroxyethyl)anilines and their pharmacological properties

AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

DOCUMENT TYPE:

LANGUAGE:

AB Fifteen title compds. (I; R = H, Cl, Ph, PhCH2CH2, PhO, PhS, PhCH2S, MeS, or cyclohexylthio; R1 = H or Et) were synthesized and tested pharmacol. All I had sedative action in mice at subtoxic doses. Anticonvulsant activity was shown only by 4-(phenylthio)-N-(2-hydroxyethyl)aniline (I; R = 4-PhS; R1 = H; II) [51026-08-5] and 4-(phenylthio)-N-(1-ethyl-2-hydroxyethyl)aniline (I; R = 4-PhS; R1 = Et; III) [51026-09-6]. With respect to selective antibacterial action in vitro, none of the compds. had greater activity than that previously found for II. All I in which R1 = H had antiinflammatory activity at 100-200 mg/kg against formalin-induced edema in the rat paw, whereas of the compds. in which R1 = Et, only III had such activity. Various routes for the synthesis of I are described, the most satisfactory of which was reduction

of the corresponding Et N-phenylglycinates with LiAlH4; the Et N-phenylglycinates were prepared by condensing the appropriate substituted aniline with BrCH2CO2Et (for I; R = H) or with EtBrCHCO2Et (for I; R = Et).

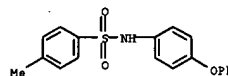
IT 51170-33-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 51170-33-3 CA

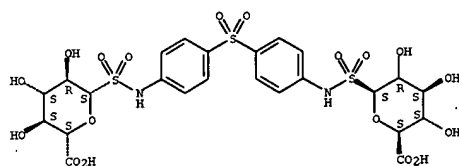
CN Benzenesulfonamide, 4-methyl-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)



10/810,325

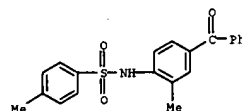
L12 ANSWER 29 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 76:135483 CA
 TITLE: Analytical studies on antileprosy drugs. 6. Analysis of sulfone drugs and their metabolites by thin-layer chromatography
 AUTHOR(S): Tsumumi, Sadae; Sakamoto, Yoshiki; Nakamura, Kazunari
 CORPORATE SOURCE: Natl. Inst. Lepr. Res., Tokyo, Japan
 SOURCE: Repura (1970), 39(1), 17-25
 CODEN: REPUAC; ISSN: 0024-1008
 DOCUMENT TYPE: Journal
 LANGUAGE: Japanese
 AB Thin-layer chromatog. is an effective means to sep. and analyze 4,4'-sulfonyldianiline (I) [80-08-0], 4,4'-diaminodiphenyl sulfoxide (II) [119-59-5], 4,4'-diaminodiphenyl sulfide (III) [139-65-1] and their mono-N-acetylates. A sample of human urine was examined after oral administration of II. The metabolites identified were III, III monoacetylate, II monoacetylate, and I. When Promin A [34569-22-7] was injected i.v. into rabbits, the main metabolites found in the urine were I and 4,4'-diaminodiphenyl sulfide mono-N-glucosiduronate [34569-23-8].
 IT 34569-22-7
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (metabolism of)
 RN 34569-22-7 CA
 CN β -D-Glucopyranuronic acid, 1,1'-[sulfonylbis(4,1-phenyleneiminosulfonyl)]bis[1-deoxy-, tetrasodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



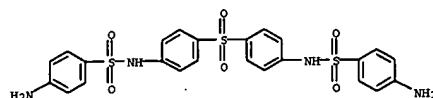
● 4 Na

L12 ANSWER 30 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 74:86060 CA
 TITLE: Amides and amines with analgesic and antiinflammatory activity
 AUTHOR(S): Artini, D.; Buttinoni, A.; Dradi, E.; Logemann, W.; Mandelli, V.; Melloni, P.; Tommasini, R.; Tosolini, G.; Vita, G.
 CORPORATE SOURCE: Carlo Erba Ther. Res. Inst., Milan, Italy
 SOURCE: Arzneimittelforschung (1971), 21(1), 30-6
 CODEN: ARZNAD; ISSN: 0004-4172
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB Of the 60 4-amido-benzophenones and 33 4-aminobenzophenones prepared and tested for antiinflammatory activity in the carrageenin test, for analgesic activity in the phenylbenzoquinone test, and for antibradykinin activity and toxicity in mice, 3-methyl-4-(ethoxyacetylaminobenzophenone (I) was the most active with the least toxicity. Its analgesic activity was 5 times that of phenylbutazone and its antiinflammatory and antibradykinin activities were equal to those of phenylbutazone. It had oral LD50 values of 1140 and 2280 mg/kg in mice and rats, resp. and oral subacute toxicity (7-day) in rats was 1040 mg/kg. 3-Methyl-4-aminobenzophenone was the only metabolite found in the urine of rats treated with I. 4-Aminobenzophenone (II) was the most active compound tested, the analgesic and antiinflammatory activities being >7.5- and 2-fold greater than those of phenylbutazone but its proclivity for producing methemoglobin precludes it for therapeutic use. 4-(Ethoxyacetylaminobenzophenone, 2-methyl-4-(ethoxyamino)benzophenone, and 2-methyl-4-aminobenzophenone also increased methemoglobin formation in mice 35-45-fold, whereas I and 3-methyl-4-aminobenzophenone had no effect on its formation. A Me group in the position ortho relative to the amino or amido group is important as regards both activity and side effects, because it prevents methemoglobin formation. The amines were synthesized from primary amines obtained from a Friedel-Crafts condensation in the presence of polyphosphoric acid or reaction of the nitro derivative with phenylacetonitrile followed by oxidation of the resulting oxime with a 30 H2O2 solution and then selective reduction. The amides were obtained by reacting the primary amine with an acid chloride in the presence of a base. Secondary amines were synthesized from primary amines by reacting the Na salts of sulfonamides obtained from p-toluenesulfonyl chloride with suitable alkyl halides followed by saponification in concentrated H2SO4.
 IT 31680-64-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 31680-64-5 CA
 CN p-Toluenesulfono-o-toluidide, 4'-benzoyl- (8CI) (CA INDEX NAME)



L12 ANSWER 30 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

L12 ANSWER 31 OF 41 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 67:42477 CA
 TITLE: A new method for the manufacture of bis(4-amino-phenyl) sulfone and the antileprosy, antituberculosis, and anti-biotic activities of some new derivatives related to this drug
 AUTHOR(S): Sah, Peter P. T.; Peoples, S. Anderson; Kwan, S. T.; Sah, Hamilton J.
 CORPORATE SOURCE: School of Vet. Med., Univ. of California, Davis, CA, USA
 SOURCE: Arzneimittelforschung (1967), 17(4), 425-31
 CODEN: ARZNAD; ISSN: 0004-4172
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Bis(4-aminophenyl) sulfone was prepared by passing toluene vapor into concentrated H2SO4 in the presence of P2O5 at 180° for 24 hrs. to form 4,4'-dimethyldiphenyl sulfone which was isolated, purified, and oxidized to 4,4'-dicarboxyldiphenyl sulfone with dilute H2SO4 and K2Cr2O7 solns. Esterification of the dicarboxylic acid with absolute MeOH or EtOH yields the dimethyl or diethyl ester which upon amination yields 4,4'-dicarbamoyldiphenyl sulfone which was then degraded to bis(4-aminophenyl) sulfone by the Hofmann degradation. The effectiveness of this compound and 7 related derivs., bis(4-L-ascorbanamidophenyl) sulfone, bis(4-sulfanilamidophenyl) sulfone, bis(4-hydrazinophenyl) sulfone, bis(4-D-glucuronolactone hydrazinophenyl) sulfone, plus di-Na bis(4-D-glucuronic acid hydrazinophenyl) sulfone, di-Na bis(4-succinylamidophenyl) sulfone, di-Na bis(4-phthalylamidophenyl) sulfone, and bis[4-(p-ethoxyphenylthiocarbamido)phenyl] sulfone against leprosy, tuberculosis, and other microorganisms was reviewed. 57 references.
 IT 14168-07-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 14168-07-1 CA
 CN Benzenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[4-amino- (9CI) (CA INDEX NAME)



L12 ANSWER 32 OF 41 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 55:27710 CA
 ORIGINAL REFERENCE NO.: 55:447b-1, 5418a-b
 TITLE: Esters and ketones related to diphenylacetic acid
 AUTHOR(S): Wolff, Manfred E.; Owings, Franklin F.
 CORPORATE SOURCE: Smith, Kline & French Labs., Philadelphia, PA
 SOURCE: Journal of Organic Chemistry (1960), 25, 1235-8
 CODEN: JOCEAH; ISSN: 0022-3263

DOCUMENT TYPE: Journal

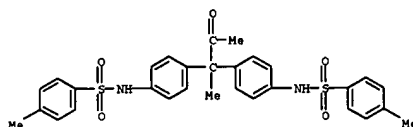
LANGUAGE: Unavailable

AB The title compds. were prepared to study their pharmacol. properties. H₂SO₄ (302 ml.), 71 ml. H₂O, 163 ml. AcOH, and 90.6 g. (4-O₂NC₆H₄)₂CHCO₂Me (Skerratt and Woodcock, CA 47, 1075c) refluxed and stirred 18 hrs. at 95° gave 71% [4, x-X(Y)C₆H₃]ZCROR' (I) (X = O₂N, Y = H, R = Me, R' = OH), m. 175-7° (decomposition) (80% AcOH), converted by refluxing 1 hr. with excess SOCl₂ into 63% acid chloride, m. 125-6° (C₆H₆-petr. ether). [4, x-Me(O₂N)C₆H₃]ZCHCO₂H (Haiss, Ber. 15, 1474(1892)) (15 g.) in 300 g. SOCl₂ heated at 80° until HCl ceased to evolve and evaporated in vacuo gave 57% I (X = Me, Y = O₂N, R = Me, R' = Cl), m. 89-90° (hexane). The appropriate acid chloride (1 mole equivalent) in C₆H₆ (10% solution) treated with 2 mole equivs. of the requisite alc. gave the following I (X, Y, R, R', t yield, m.p. given): O₂N, H, H, OCH₂CH₂NMe₂ (II), 67, 117-19° (decomposition) (C₆H₆-petr. ether); O₂N, H, H, OCH₂CH₂NMe₂, 64, - [HCl salt, m. 164-6° (Me₂CO-Et₂O)]; O₂N, H, H, OEt (III), -, 126-8° (EtOH); O₂N, H, Me, OCH₂CH₂NMe₂, - [HCl salt m. 222-3° (decomposition) (MeOH-Et₂O)]; O₂N, H, Me, OCH₂CH₂NMe₂ (IV), 45, - [HCl salt m. 171-2° (iso-PrOH)]; Me, O₂N, Me, OCH₂CH₂NMe₂ (V), - (picrate m. 105-7° (EtOH)); O₂N, H, Me, OCH₂CH₂NMe₂, - [HCl salt m. 185-7° (MeOH-Et₂O)]. The appropriate acid chloride (1 mole equivalent) in CH₂Cl₂ (10% solution) added dropwise to 2 mole equivs. CH₂N₂ in CH₂Cl₂, the solution allowed to stand 18 hrs., stirred with excess 5% aqueous HI, the CH₂Cl₂ layer separated, washed with H₂O, 10% aqueous Na₂SO₃, and H₂O, dried, and evaporated gave by this procedure 77% I (X = O₂N, Y = H, R = R' = Me), m. 164-6° (95% EtOH), and 81% I (X = R = R' = Me, Y = O₂N) (VI), m. 100-1° (MeOH). VI (1 g.) and 0.6 g. N₂H₄ in 10 ml. warm absolute EtOH treated portionwise with Raney Ni until frothing ceased, cooled, and the filtered solution evaporated gave 26% I (X = R = R' = Me, Y = O₂N), m. 117-18° (C₆H₆-petr. ether). II, III, and IV in dioxane (10% solns.) hydrogenated over PtO₂ gave 67% I (X = H₂N, Y = R = H, R' = OCH₂CH₂NMe₂), m. 130-2° (C₆H₆-petr. ether), I (X = H₂N, Y = R = H, R' = OEt), 88-9° (C₆H₆-petr. ether), and 70% I (X = H₂N, Y = H, R = Me, R' = OCH₂CH₂NMe₂), oil, resp. V on reduction gave 35% I (X = R = Me, Y = H₂N, R' = OCH₂CH₂NMe₂) HCl salt, m. 195-6° (EtOH-Et₂O). To 14.0 g. (4-H₂NC₆H₄)₂CHCO₂H mono-HCl salt [Heller, Ann. 375, 261(1910)] in 30 ml. 4N aq NaOH was added alternately and dropwise during 30 min. 21.0 g. ClCO₂CH₂Ph and 30 ml. 4N aqueous NaOH at 5° with stirring, the mixture stirred 2 hrs. and treated with 150 ml. EtOAc and 150 ml. 10% HCl, gave from the organic layer 51% I (X = NHCO₂CH₂Ph, Y = R = H, R' = OH), m. 159-62°. C₆H₅NH (300 ml.), 38.7 g. (4-H₂NC₆H₄)₂CHCO₂Ac (VII) di-HCl salt (VIII) (Allen and Corwin, CA 45, 1080e; Benzze and A., CA 52, 1972f),

L12 ANSWER 32 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

and 57.2 g. p-MeC₆H₄SO₂Cl stirred 45 min. at 27°, the mixt. poured into H₂O and extd. with CHCl₃ gave 86.6 g. ditosyl deriv. (IX) of VII, m. 75-80°. IX (1 mole equiv.) in EtOH (25% soln.) treated with 3 mole equivs. N NaOH and the appropriate alkyl iodide 3 hrs. at 75° gave 59% I (X = NMeO₂SC₆H₄Me-4, Y = H, R = R' = Me) (X), dimorphic, m. 147-9° (EtOH) and 170-1° (EtOH), and 44% I (X = NMeO₂SC₆H₄Me-4, Y = H, R = R' = Me) (XI), m. 166-7° (EtOH). X and XI in 2 vols. 80% H₂SO₄ heated 5 min. at 155-60°, the soln. cooled, poured into H₂O, and made alk. with 20% aq. NaOH gave 73% I (X = NMe, Y = H, R = R' = Me) HCl salt, m. 203-4° (EtOH), and 40% I (X = NHEt, Y = H, R = R' = Me), m. 96-7° (EtOH), resp. VIII (16.4 g.) in 25 ml. 37% aq. HCl and 25 ml. H₂O treated dropwise at 0° with 7.2 g. NaNO₂ in 15 ml. H₂O with stirring, the excess HNO₂ neutralized with urea, and the soln. treated with 15.2 g. NaBF₄ in 30 ml. H₂O gave 17.0 g. diazonium fluoroborate (XII), m. 139° (decompn.). XII heated with a free yellow flame, the residue dissolved in CHCl₃, the soln. washed with 10% aq. NaOH and H₂O, dried, and fractionated gave 27% I (X = F, Y = H, R = R' = Me), b.p. 7.133°.

IT 5112-04-9, p-Toluenesulfonamide, 4',4''-(1-methylacetyliden)bis-(preparation of)
 RN 5112-04-9 CA
 CN p-Toluenesulfonamide, 4',4''-(1-methylacetyliden)bis- (6CI, 8CI) (CA INDEX NAME)



L12 ANSWER 33 OF 41 CA COPYRIGHT 2005 ACS on STN

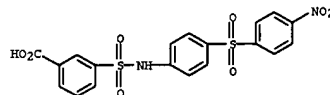
ACCESSION NUMBER: 49:53693 CA
 ORIGINAL REFERENCE NO.: 49:10367c-1, 10368a
 TITLE: Diphenyl sulfones
 INVENTOR(S): Pohls, Paul; Behnisch, Robert
 PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
 DE 895600 19531105 DE
 AB 4-X1C₆H₄SO₂ C₆H₄NHR1RX2 (I), where X1 is NO₂, NH₂ or acyl-NH, R1 is CO or SO₂, R2 an organic radical, and X2 an acid radical (possibly in the form of a water-soluble salt group), and which possess valuable chemotherapeutical properties are prepared by treating a 4'-aminodiphenyl sulfone derivative substituted in the 4-position by NO₂ or acyl-NH, with the anhydride, monoester, or monohalide of a polybasic acid or with the anhydride, ester, or halide of an acid containing in addition a substituent (III) replaceable by (or convertible to) an acidic group. III is then replaced by (or converted to) the acid radical, and the NO₂ or acyl-NH substituent in the 4-position, possibly converted to NH₂. Alternatively the corresponding di-Ph sulfide or sulfoxide derivative is used in the place of II and the sulfide or sulfoxide radicals of the resulting condensation products are oxidized to sulfone groups. [In what follows, the compds. 4-(4-RC₆H₄SO₂)C₆H₄R' are represented by IA (R, R') with R and R' shown.] A mixture of IA (O₂N, NH₂) 55.6 g. and succinic anhydride (V) 20 g. in Me₂CO 300 cc. refluxed 7 h. with stirring, then cooled with ice, gives IA (O₂N, NHCOCH₂CH₂CO₂H) (VI), m. 200°, soluble in warm Na₂CO₃ solution. Refluxing VI 62 g. in water 400 cc. containing NaHCO₃ 14 g. with Fe 300 g., glacial AcOH 10 cc., and water 500 cc. 5 h. gives IA (H₂N, NHCOCH₂CH₂CO₂H) (VII), m. 153°. Similarly are prepared: IA (O₂N, NHCOCH₂CH₂CO₂H) (VIII), m. 220°, from IV and maleic anhydride; VII, by reduction of VIII; VI, by oxidation of the sulfide, m. 173° [obtained from 4-(4-O₂NC₆H₄)₂C₆H₄NH₂ and V], or of the sulfoxide with H₂O₂ in AcOH; IA, Me₂CHCH₂CONH, NHCOCH₂CH₂CO₂H, m. 184-5°, from IA (Me₂CHCH₂CONH, NH₂) and V; IA (H₂NCONH, NHCOCH₂CH₂CO₂H), from IA (H₂NCONH, NH₂) and V; IA (MeO₂CONH, NHCOCH₂CH₂CO₂H), from IA (MeO₂CONH, NH₂) and V; IA (O₂N, NHCOCH₂CH₂CO₂H) (IX), m. 245°, from IV and 3-ClCO₂C₆H₄SO₂F (X); IA (O₂N, NHCOCH₂CH₂CO₂H) (XI), by treating IX with 10% alc. NaOH; IA (O₂N, NHCOCH₂CH₂CO₂H) (XII), from IV and 3-ClO₂SC₆H₄CO₂H; water-soluble IA (O₂N, NHCOCH₂SO₃H), from Na₂SO₃ and IA (O₂N, NHCOCH₂Cl), m. 184° [prepared from IV and ClCH₂COCl]; IA (O₂N, NHCOCH₂CH₂CO₂H) (XIII), from IV and o-C₆H₄(CO₂)₂ or IA (O₂N, (carboxypyridyl)ureido], from IV and 2,3-pyridinedicarboxylic anhydride; IA (O₂N, carboxy-2,6-dimethylpyridinecarboxamido), from IV and 2,6-dimethyl-3,4-pyridinedicarboxylic anhydride; IA (AcNH, NHCOCH₂SO₃H), from Na₂SO₃ and IA (AcNH, NHCOCH₂Cl); IA (AcNH, NHCOCH₂CH₂CO₂H), m. 136-7°, from XIII and V; IA (AcNH, NHCOCH₂CH₂CO₂H) (XIV), b.p. 126°, which is prepared from SOCl₂ and m-HO₂CC₆H₄CO₂Me; IA (AcNH, NHCOCH₂CH₂CO₂H), m. 242-3°, from XIII and maleic anhydride IA (AcNH, NHCOCH₂CH₂CO₂H) (XV), m. 250-1°, from XIII and X; IA (AcNH, NHCOCH₂CH₂CO₂H) (XVI), by saponifying XV; IA (H₂N, NHCOCH₂SO₃H), from Na₂SO₃ and IA (O₂N, NHCOCH₂Cl)

L12 ANSWER 33 OF 41 CA COPYRIGHT 2005 ACS on STN (Continued)

with subsequent redn.; IA (H₂N, NHCOCH₂CH₂CO₂H) (XVII), by redn. of XI; IA (H₂N, NHCOCH₂CH₂CO₂H) (XVIII), by redn. of XII; IA (H₂N, NHCOCH₂CH₂CO₂H) (XIX), by redn. of the corresponding nitro compd.

IT 855198-35-5, Benzoic acid, m-[[p-(p-nitrophenylsulfonyl)phenyl]sulfonyl]- (preparation of)
 RN 855198-35-5 CA
 CN Benzoic acid, m-[[p-(p-nitrophenylsulfonyl)phenyl]sulfonyl]- (5CI) (CA INDEX NAME)



L12 ANSWER 34 OF 41 CA COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 46:48425 CA
 ORIGINAL REFERENCE NO.: 46:8035c-1, 8036a
 TITLE: Benzidine derivatives as chemotherapeutics
 AUTHOR(S): Kawai, I. Tomohiko; Ueda, Takeo
 CORPORATE SOURCE: Keio-Gijyuku Univ.
 SOURCE: Yakugaku Zasshi (1951), 71, 1478-81
 CODEN: YKZAJJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB Benzidine (I) (3.4 g.) and 9 g. p-ACNCHG4SO2Cl (II) in 60 ml. Me2CO heated 2 hrs. with 2 g. NaHCO3 on a water bath, filtered, and recrystd. from AcOH give 8.4 g. 4,4'-bis-(N4-acetylsulfanilamido)biphenyl (III), m. 276°; 3 g. III in 30 ml. alc. and 10 ml. concentrated HCl heated on a water bath, the HCl salt filtered, treated in aqueous NaHCO3, and recrystd. from Me2CO-MeOH give 1.8 g. 4,4'-bis(sulfanilamido)biphenyl (IV), m. 268°. I (1.8 g.) and 1.8 g. 1,4-ACNCHG4SO2Cl in 40 ml. Me2CO refluxed 2 hrs. with 2.1 g. filtered, and washed with water, Me2CO, and MeOH give 4.7 g. 4,4'-bis-(1-acetamid-4-naphthylsulfonamido)biphenyl, m. 254°. I (1.8 g.) and 4.4 g. p-O2NCHG4SO2Cl in 40 ml. Me2CO refluxed 3 hrs. with 2.1 g. NaHCO3, filtered, and recrystd. from MeOH and Me2CO give 4.2 g. 4,4'-bis(p-nitrophenylsulfonamido)biphenyl, m. 298°. Toluidine (2.1 g.) and 4.7 g. II in 60 ml. Me2CO refluxed 2 hrs. with 2.5 g. NaHCO3, filtered, and recrystd. from Me2CO give 4.2 g. 3,3'-di-Me derivative (V) of III; 3,3'-di-Me derivative of IV, m. 232-3°. Dianisidine (3.7 g.) and 7 g. II in 50 ml. Me2CO refluxed 2 hrs. with 3.5 g. NaHCO3 give 6.8 g. 3,3'-di-MeO derivative of III, m. 293°; 3,3'-di-MeO derivative of IV, m. 253-4°. Dichlorobenzidine (2.5 g.), 4.7 g. II in 40 ml. Me2CO, and 2 g. NaHCO3 refluxed 2 hrs., the solvent removed, and the product recrystd. from MeOH give 4.6 g. 3,3'-di-Cl derivative

of III, m. 158-60°. Benzidine sulfone (1.2 g.), 2.4 g. II, 50 ml. Me2CO, and 1 g. NaHCO3 refluxed 12 hrs., filtered, and the product recrystd. from Me2CO give 0.8 g. 4,4'-bis-(N4-acetylsulfanilamido)diphenyl sulfone, m. 268°. 4-Amino-4'-benzamido-biphenyl (1 g.), 0.8 g. II, 0.5 g. NaHCO3, and 40 ml. Me2CO refluxed 3 hrs., filtered, and the product recrystd. from Me2CO give 0.7 g. (N4-acetylsulfanilamido)-4'-benzamido-biphenyl, m. 291°. 4-Sulfanilamido-4'-benzamido-biphenyl, m. 310°. [2,4-O2N(H2N)-CGH3]CGH4NHAC (1.3 g.), 1.1 g. II, 1 g. NaHCO3, and 40 ml. Me2CO refluxed 8 hrs., filtered, and the product recrystd. from Me2CO give 1.3 g. 2-nitro-4-(N4-acetylsulfanilamido)-4'-acetamidobiphenyl (VI), m. 273°; 4-(p-H2NCHG4SO2NH) analog (VII) of VI, m. 252°. p-[2,4-H2N(ACNH)CGH3]CGH4NHAC (1.4 g.), 1.2 g. II, 0.5 g. NaHCO3, and 50 ml. Me2CO refluxed 10 hrs., filtered, and the product recrystd. from MeOH give 1.1 g. 2-(N4-acetylsulfanilamido)-4'-diacetamidobiphenyl, m. 271°. [9 g.), 16 g. p-O2NCHG4SO2Cl, 21 g. NaHCO3, and 90 ml. Me2CO refluxed 2 hrs., filtered, and the product washed with alc. and Me2CO give 21 g. 4,4'-bis(p-nitrobenzamido)biphenyl, m. above 330°; 4,4'-bis(p-aminobenzamido)biphenyl, m. 317°. I (2.4 g.), 8 g. p-BzOC6H4SO2Cl in 60 ml. Me2CO and 1.5 g. NaHCO3 refluxed 2 hrs., filtered, and the product recrystd. from Me2CO give 6.3 g. 4,4'-bis(p-benzoyloxysulfonamido)biphenyl, m. 238°. I (2.7 g.), 6.6 g. p-EtOC6H4SO2Cl in 100 ml. Me2CO, and 2 g. NaHCO3 refluxed 2 hrs. and the product recrystd. from MeOH and Me2CO give 5.8 g. 4,4'-bis(p-phenoxysulfonamido)biphenyl, m. 234.5°. I (2.7 g.) and 8-1 g. 1,4-EtOC10H6SO2Cl in a similar way give 7.2 g. 4,4'-bis(1-ethoxy-4-naphthylsulfonamido)biphenyl, m. 177°. The antibacterial action of

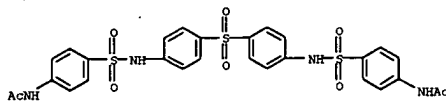
L12 ANSWER 34 OF 41 CA COPYRIGHT 2005 ACS ON STN (Continued)

III, VI, and VII equaled that of sulfanilamide and IV was as potent as sulfadiazine.

IT 115166-72-8, Acetanilide, 4',4''-bis(sulfonylbis(p-phenyleneiminosulfonyl))bis- (preparation of)

RN 115166-72-8 CA

CN Acetanilide, N,N'-bis(sulfonylbis(4,1-phenyleneiminosulfonyl-4,1-phenylene))bis- (9CI) (CA INDEX NAME)



L12 ANSWER 35 OF 41 CA COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 41:29770 CA
 ORIGINAL REFERENCE NO.: 41:5976e-1, 5977a-1, 5978a-d
 TITLE: Studies in chemotherapy. I
 AUTHOR(S): Buu-Hoi; Royer, Rene; Jouin, J. J.; Lecocq, J.; Guettier, D.
 SOURCE: Bulletin de la Societe Chimique de France (1947) 128-36
 CODEN: BSCFAS; ISSN: 0037-8968

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

OTHER SOURCE(S): CASREACT 41:29770

AB Investigated for their inhibitory effect on tuberculosis bacillus (I) and hemolytic streptococcus (II) and for their general toxicity were various derivs. of dihydrochaulmoogryl alc. (III), PhNHNH2 (IV), homophthalimide, 2,5-dimethylpyrrole, coumarin, indophenazine, sulfanilamide, p-toluenesulfonamide, and p-naphthalenesulfonamide. Also the inhibitory action toward I and pneumococcus of the following are given: PhSET, p-CHG4(-NH)NH2 (R: H, NO2, NH2, MeS, EtS, PrS) and 2,2'-dihydroxy-5,5'-dichlorobenzil. To 6 g. IV in 25 ml. dry xylene was added 3 g. NaNH2. Oleyl bromide (15 g.) was added, the mixture refluxed 3 h., decanted and dried over K. Distillation gave 5 g. of PhN(NH2)C18H35, viscous, pale-yellow oil, b18 310-5°, b25 265-70°, very soluble in lipides, much less toxic than IV. Similarly o-chloromethyl-naphthalene gave PhN(NH2)CH2ClO7-a, very viscous, pale-yellow oil, b2 225-5°, (considerable higher-boiling material also was produced, possibly a disubstituted product), gave a crystalline acetylhydrazide with Ac2O, much less toxic than IV. Tests on tuberculosis in guinea pigs gave no interesting results. Similarly (reaction more difficult) 1-chloromethyl-4-methyl-naphthalene gave PhN(NH2)CH2Cl1H9, very viscous, yellow oil, b3 about 250°. To 40 g. III in 250 ml. dry C6H6 was added 35 g. p-O2NCHG4SO2Cl, and the mixture was heated 3 h. after the first vigorous reaction. The mixture was washed and the C6H6 driven off, leaving a colorless, greasy product, dihydrochaulmoogryl p-nitrobenzoate, decompose on distillation in a high vacuum, strongly inhibitory

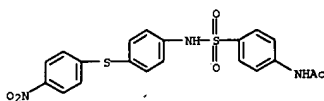
to I in vitro but inactive in guinea pigs. The p-hydroxybenzoate and p-aminobenzoate of III were prepared and are being tested in vivo. Homophthalic anhydride (2 g.) and 2 g. 2-undecylamine (V) (from the

reduction of Me nonyl ketone oxime) were distilled together to give N-2-undecylhomophthalimide, viscous, amber-yellow oil, b15 237-8°, soluble in alkali with a yellow fluorescence (due to enol form), inactive toward II in mice. AcCH2CH2Ac (VI) and V were condensed by the method of Knorr and Paal to give N-2'-undecyl-2, 5-dimethylpyrrole, b13 178-9°. p-tert-Butylaniline and VI gave N-(p-tert-butylphenyl)-2, 5-dimethylpyrrole, b12 167°. m. 83-4°, colorless needles from alc. p-CH3SC6H4NH2 and VI gave N-p-methylmercaptophenyl-2, 5-dimethylpyrrole, m. 60-1° (from alc.), pale rose. VI and m-H2NCHG4NH2 gave N-m-dimethylaminophenyl-2, 5-dimethylpyrrole, b11 174-5°, m. 37°, colorless needles from aqueous alc. VI and 4-methyl-1-naphthylamine gave N-(4'-methyl-1'-naphthyl)-2, 5-dimethylpyrrole, m. 154°, colorless plates from alc. 12, 5-naphthalenediamine and VI gave 1, 5-bis (2', 5'-dimethyl-1'-pyrryl)-naphthalene, colorless needles from AmOH, m. 288-9° (rapid heating), sublimes easily on heating. N-o-Chlorophenyl-2, 5-dimethylpyrrole, b15 150°, slight tar-like odor. Sulfanilamidodithiazole and VI gave N-(2', 5-dimethylpyrryl)-p-phenylsulfamidodithiazole, decompose 300° without melting. 3, 2-CH2:CHCH2(HO)CGH3CHO, b11 111° (from Claisen rearrangement of o-CH2:CHCH2OC6H4CHO) was condensed with CH3(CO2Et)2 (VII) in piperidine to

L12 ANSWER 35 OF 41 CA COPYRIGHT 2005 ACS ON STN (Continued)

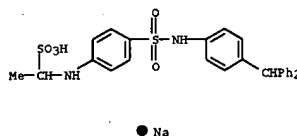
give Et 8-allylcoumarin-3-carboxylate (VIII), colorless needles from alc., m. 86°; LD for a mouse was about 0.20 g. Hydrolysis of VIII gave 8-allylcoumarin-3-carboxylic acid, colorless needles from alc., m. 145-6°. Similarly, 5, 2-Cl(OH)CGH3CHO (IX) and VII gave Et 6-chlorocoumarin-3-carboxylate (X), colorless needles from alc., m. 159°, pale yellow in H2SO4; LD for a mouse was 0.20 g. Hydrolysis of X gave 6-chlorocoumarin-3-carboxylic acid (XI), colorless prismatic needles from alc., m. 193°; Na salt slightly sol. in H2O, sepp. as pearly plates. XI was converted to the acid chloride (colorless solid) by SOCl2 and thence to the amide, m. 207-9° (from alc.). AcCH2CO2Et and IX in piperidine gave 3-acetyl-6-chlorocoumarin, slightly sol. in alc., colorless needles from alc. + C6H6, m. 207° (rapid heating), sublimes easily at 190°, oxime m. 228° (decomp.). o-H2NCHG4COOH was converted to isatin-7-carboxylic acid (XII), m. about 235° (decomp.), by the method of Sandmeyer. XII and o-C6H4(NH2)2 (XIII) in HOAc gave indophenazine-7-carboxylic acid, yellow prisms from pyridine, m. 315°, yellow-brown in H2SO4. Isatin-6-carboxylic acid (XIV) (from m-H2NCHG4COOH) and XIII gave indophenazine-8-carboxylic acid, cryst. from PhNO2, m. about 340° (decomp.), easily sol. in aq. NaOH (red color). Isatin-5-carboxylic acid (from p-H2NCHG4COOH) and XIII gave indophenazine-9-carboxylic acid, solid at 380°, yellow-brown in H2SO4. 1, 2-Naphthalenediamine and XIV gave 1, 2-(or 3, 4)-benzindophenazine-8-carboxylic acid, m. 340° (decomp.), deep-red in H2SO4, yellow Na salt. 2-Aminofluorene and p-ACNCHG4SO2Cl (XV) in pyridine gave N-acetylsulfanilamido-2-fluorene (XVI), needles from alc. + C6H6, m. 258-9°, inactive toward I or II. Prolonged heating of XVI with a large excess of concd. HCl gave 2-sulfanilamidofluorene, needles from HOAc, m. 229-30°. Similarly 5-aminoacenaphthene and XV gave N-acetylsulfanilamido-5-acenaphthene, plates from C6H6, m. 270°, slightly sol. in alc., dark coloration in H2SO4 which rapidly turned darker. p-CH3SC6H4NH2 and XV gave N-acetylsulfanilamido-4-methylmercaptobenzene (XVII), needles from alc., m. 170°, blue in H2SO4. Boiling of XVII with large excess of concd. HCl gave sulfanilamido-4-methylmercaptobenzene, needles from alc., m. 192-5°, deep-blue in H2SO4, active toward II. 4, 4'-O2NCHG4SC6H4NH2 and XV gave 4(N-acetylsulfanilamido)-4'-nitrodiphenyl sulfide, plates from alc. + C6H6, m. 221°, easily sol. in alc. (red color). 2-Sulfanilamido-4-methylthiazole and XV gave N4-(N-acetylsulfanilamido)sulfanilamido-N1-methylthiazole, needles from HOAc, m. 270-1°. 4-Amino-4'-nitrodiphenyl sulfoxide and XV gave 4(N-acetylsulfanilamido)-4'-nitrodiphenyl sulfoxide, cryst. from HOAc, m. 252° (decomp.); resists decacetylation by hot HCl. o-Anisidine and XV gave N-acetylsulfanilamido-2-methoxybenzene, plates from alc. + C6H6, m. 204° inactive toward II. m-PhCH2NHCHG4Cl and XV gave N4-acetyl-N1-benzyl-N1-(3-chlorophenyl)sulfanilamide, colorless needles from alc., m. 166°. Benzidine and XV gave 4, 4'-bis(N-acetylsulfanilamido)benzidine, needles from HOAc, m. 274°. p-C6H4(NH2)2 and XV gave p-bis(N-acetylsulfanilamido)benzene (XVIII), colorless needles from HOAc, m. about 305° (decomp.). Product of decacetylation of XVIII, needles from HOAc. The following prepd. from p-CH3SC6H4SO2Cl and the appropriate amine: 2-tosylaminofluorene, needles from toluene, m. 155-6°; 5-tosylaminocacenaphthene, plates from HOAc, m. 193°; N4-tosylsulfanilamide, needles from HOAc, m. 186°; N-ethyl-N-tosyl-p-naphthylamine, plates from alc., m. 128°; N-ethyl-N-tosyl-m-chloroaniline, needles from alc., m. 72°; N-tosyl-o-anisidine, plates from alc., m. 126°; N-tosyl-N-benzyl-m-chloroaniline, needles from alc., m. 107°; N-tosyl-o-chloroaniline, leaflets from alc., m. 102°; 4-tosylamino-4'-nitrodiphenylsulfoxide, m. 211° (from HOAc), pale-yellow, green in H2SO4 turning rapidly to brown. The following

L12 ANSWER 35 OF 41 CA COPYRIGHT 2005 ACS ON STN (Continued)
 prepd. from β -naphthylsulfonyl chloride and the appropriate amine:
 N-(β -naphthylsulfonyl)-o-anisidine, needles from alc. +C₆H₆, m.
 158°; N₄-(β -naphthylsulfonyl)sulfanilamido-N1-2,
 4-dimethylpyrimidine, m. 253.5° (from C₆H₆); N-(β -
 naphthylsulfonyl)-N-benzyl-m-chloroaniline, fine prismatic needles from
 alc. +C₆H₆, m. 132°; 2-(β -naphthylsulfonylamino)fluorene,
 needles from alc. +C₆H₆, m. 162°; N₄-(β -
 naphthylsulfonyl)sulfanilamide, m. 250° (from C₆H₆);
 N-(β -naphthylsulfonyl)-p-nitraniline, yellow prisms from alc. +C₆H₆,
 m. 171-2°; N-(β -naphthylsulfonyl)-o-chloroaniline, prisms from
 alc., m. 115°; N-(β -naphthylsulfonyl)-N-ethyl-o-chloroaniline,
 failed to cryst.; N-(β -naphthylsulfonyl)-N-ethyl- β -
 naphthylamine, needles from C₆H₆, m. 187°.
 IT 135209-93-7, Acetanilide, 4'-[([p-(p-nitrophenylthio)phenyl]sulfamo
 yl)-
 (preparation of)
 RN 135209-93-7 CA
 CN Acetanilide, N-[4-[[[4-(4-nitrophenyl)thio]phenyl]amino]sulfonyl]phenyl]-
 (9CI) (CA INDEX NAME)



L12 ANSWER 36 OF 41 CA COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 41:4918 CA
 ORIGINAL REFERENCE NO.: 41:1011,1012a-e
 TITLE: Tuberculostatic activity in vitro of twenty-nine
 different compounds
 AUTHOR(S): Frisk, A. Rune
 CORPORATE SOURCE: St. Erik's Hosp. and State Bacteriol. Lab., Stockholm
 SOURCE: Acta Medica Scandinavica (1946), 125,
 487-501
 CODEN: AMSVAZ; ISSN: 0001-6101
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable

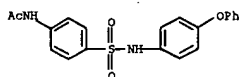
AB An exptl. technique for testing compds. in vitro for tuberculostatic
 activity against a virulent human tubercle bacilli (AT) strain is
 described. The effect of the test medium is important because of
 growth-inhibiting effects from constituents of complex media. The
 synthetic medium consisted of the following ingredients in parts by weight:
 asparagine 14, K₂HPO₄ 1.4, sodium citrate 0.9, MgSO₄ 1.5, ferric citrate
 0.3, dextrose 10.00, glycerol 30.0 g., and distilled H₂O to 1,000. One mol.
 of p-H₂NC₆H₄COOH counteracts the bacteriostatic effect of 1,000 mols.
 of sulfanilamide and about 20 mols. of sulfathiazole. Of 29 compds.
 investigated for tuberculostatic effect the most active was sulfathiazole.
 High activity was shown by 2-sulfanilamidonaphthoquinone,
 4,4'-diaminodiphenyl sulfone (I), and 4-aminophenyl 2-hydroxy-5-thiazolyl
 sulfone hydrochloride. Slight activity was shown by sulfapyrimidine,
 sulfapyridine, sulfanilamide, disodium formaldehydesulfoxylate of I
 (diasone), N,N'-digalactoside of I (tibatin), [p-(2-amino-5-
 thiazolylsulfonyl)anilino]methanesulfonylacetamide, Na
 1-[p-(2-amino-5-thiazolylsulfonyl)anilino]ethanesulfonate, 4-aminophenyl
 2-amino-4-methyl-5-thiazolyl sulfone dihydrochloride, dihydroxyphenazine
 di-N-oxide (iodinin), 2-methylquinoxaline di-N-oxide, and-thiouracil.
 Compds. which showed no activity are 2-sulfanilamido-1-methylpyridine,
 4-sulfanilamido-1-hydroxy-2-methylnaphthalene, 2-methyl-1,4-
 naphthoquinone, 4-sulfanilamidotritane (II), sodium N₄-ethanesulfonate of
 II (Ph₂CHC₆H₄NHSO₂C₆H₄NHCHMeSO₃Na), 4-(p-succinylaminobenzenesulfonamido)
 tritane (HOOCCH₂CH₂COONHCH₂C₆H₄SO₂NHCH₂C₆H₄CH₃), N,N'-di-[p-(benzenesulfonamido-4-
 trityl) succinamide] ([Ph₂CHC₆H₄NHSO₂C₆H₄NHCOCH₂)]₂, 4-
 aminomethylbenzenesulfonamide, p-aminophenyl 2-amino-5-thiazolyl sulfone
 (promizole), 4-(2-amino-5-thiazolylsulfonyl) succinamic acid, urea,
 thiourea, α -sulfanilylacetophenone, and sulfanilylacetone.
 IT 856367-52-7, Ethanesulfonic acid, 1-[p-(α,α -diphenyl-
 p-tolyl)sulfamoyl]anilino]-, sodium salt
 (tuberculostatic activity of)
 RN 856367-52-7 CA
 CN Ethanesulfonic acid, 1-[p-(α,α -diphenyl-p-
 tolyl)sulfamoyl]anilino]-, sodium salt (5CI) (CA INDEX NAME)



L12 ANSWER 36 OF 41 CA COPYRIGHT 2005 ACS ON STN (Continued)

L12 ANSWER 37 OF 41 CA COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 37:6654 CA
 ORIGINAL REFERENCE NO.: 37:1124d-i,1125a-b
 TITLE: Chemotherapy of bacterial infections. VI. Synthesis of
 N1-substituted sulfanilamides: poly- and heterocyclic
 derivatives
 AUTHOR(S): Rajagopalan, S.; Ganapathi, K.
 SOURCE: Proceedings - Indian Academy of Sciences, Section A (1942), 15A, 432-6
 CODEN: PISAA7; ISSN: 0370-0089
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 OTHER SOURCE(S): CASREACT 37:6654
 AB cf. C. A. 36, 4102.4. In continuation of the systematic syntheses of
 N1-substituted derivs. of sulfanilamide, typical representatives of
 p-H₂NC₆H₄SO₂NH (I) derivs. of Ph₂O, dibenzofuran, carbazole, acridine,
 chrysene, coumarin, tetrahydroisoquinoline and phenanthridine have been
 prepared; if any of them show promise, further elaboration in that group
 will be made. The ring systems selected are such as either are present in
 compds. with significant pharmacol. activity or may be expected
 to fill gaps in the data necessary to correlate chemical constitution with
 chemotherapeutic activity. All but 2 of the compds. described were prepared
 in the usual way by condensing p-AcNHCH₂SO₂Cl with the appropriate cyclic
 amine and hydrolyzing off the Ac group from the resulting product.
 Certain amino sulfonamides of pyridine, quinoline, naphthalene and
 biphenyl have been described in the literature with no information as to
 their therapeutic activity. As such compds. are of addnl. interest in
 ascertaining the implications of the Fildes (C. A. 34, 6364.1) and Woods
 (C. A. 34, 7408.5) theory of the mechanism of the action of sulfonamides,
 the synthesis of some of them was undertaken. 2-PhC₆H₄NHAc with ClSO₃H
 gave a sulfonyl chloride which with NH₃ yielded a product, m.
 195-8°, hydrolyzed by boiling NaOH to a compound (II) provisionally
 designated as 2-aminobiphenyl-5(?)-sulfonamide. The starting amines were
 in most cases prepared by methods recorded in the literature; the following
 are either new or were prepared by improved methods. p-AcNHCH₂SO₂Cl (15 g.
 from 19.4 g. p-MeC₆H₄NO₂) in 130 cc. AcOH and 100 cc. Ac₂O saturated
 at 0° with a slow stream of HCl (8 h.) and allowed to stand
 overnight), m. 130°; 15 g. boiled 2 h. in 200 cc. of 6 N HCl gave
 p-PhC₆H₄NH₂.HCl, m. 225-7° (decomposition). Dibenzofuran (22 g. from
 30 g. (o-HOC₆H₄)₂ and 110 g. freshly fused ZnCl₂ heated 4 h. at
 230-50° and poured while still warm into dilute HCl) (cf. Kraemer and
 Weissgerber, Ber. 34, 1662 (1901)), m. 83-4°. N-(p-
 Nitrobenzoyl)homoveratrylamine, from (MeO)C₆H₃CH₂-CH₂NH₂ and O₂NC₆H₄COCl,
 faintly yellow plates from alc., m. 149°, 8.7 g. gently refluxed
 1.5 h. with 18 cc. POCl₃ and then decomposed with water, gave 7.8 g.
 1-(p-nitrophenyl)-3,4-dihydro-6,7-dimethoxyisoquinoline, silky needles
 from alc., m. 158-9°, 6 g. of which with 50 g. Zn dust and 500 cc.
 dilute H₂SO₄ (1:3) heated 3 h. on the water bath yielded 5.1 g.
 1-(p-aminophenyl)-1,2,3,4-tetrahydro-6,7-dimethoxyisoquinoline, needles
 from water, m. 151-3°. In the following R = 1 and R' =
 p-AcNH-CH₂SO₂NH; the temps. are the m. ps. of the products: 2-R-di-Ph
 ether, 149° (R', 162°); 4-R-di-Ph ether, 177-8° (R',
 183°); 3-R-phenanthrene, 213-15° (R', 244-5°);
 6-R-chrysene, 265°; 2-R-dibenzofuran, 242-3°; 3-R-carbazole,
 251° (decomposition); 9-R-carbazole, 224° (decomposition) (R',
 202-3° (decomposition)); 6-R-coumarin, 189-90°;
 9-R-acridine-2HCl, - (9-R'-acridine, 273-5° (decomposition));
 1-(p-R-phenyl)-1,2,4,4-tetrahydro-6,7-dimethoxyisoquinoline, 162°
 (sinters 159°); 2-(m-R-phenyl)-phenanthridine, 251-3°
 (decomposition) (sinters 246°); II, 186°; 4-

L12 ANSWER 37 OF 41 CA COPYRIGHT 2005 ACS ON STN (Continued)
 aminonaphthalenesulfonamide, 250-1* (decompn.). These compds. are
 being tested in exptl. plague, p-hemolytic streptococcal and
 pneumococcal (type 1) infections in mice.
 IT 315248-48-7, Acetanilide, p-[4-phenoxyphenylsulfamyl]-
 (preparation of)
 RN 315248-48-7 CA
 CN Acetanilide, N-[4-[[[(4-phenoxyphenyl)amino]sulfonyl]phenyl]- (9CI) (CA
 INDEX NAME)



L12 ANSWER 38 OF 41 CA COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 36:26808 CA
 ORIGINAL REFERENCE NO.: 36:4103a-1,4104a-e
 TITLE: Antibacterial substances allied to sulfanilamide
 AUTHOR(S): Dewing, T.; Gray, W. H.; Platt, B. C.; Stephenson, D.
 SOURCE: Journal of the Chemical Society, Abstracts (1942) 239-44
 CODEN: JCSAAZ; ISSN: 0590-9791

DOCUMENT TYPE: Journal

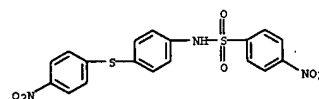
LANGUAGE: Unavailable

GI For diagram(s), see printed CA Issue.

AB Shaking 30 g. p-HZNC6H4SO2NH2 in 150 cc. 2.5 N NaOH with 25 cc. BzCl gives a mixture of the N4-Bz derivative, m. 284° (from 16 parts C5H5N), and the N1,N4-di-Bz derivative, m. 268-70° (from 30 parts each of EtOH and H2O); the latter is more conveniently prepared from the components in C5H5N; both form sparingly soluble Na salts. The following 3 amides were prepared by warming on a water bath for 1 hr. p-ACNHC6H4SO2NH2 and the acid chloride in C5H5N, followed by refluxing with N NaOH for 1 hr.: sulfanilylmyristamide, m. 126°; the adipamide (from ClCO(CH2)4CO2Et), m. 178°, and the chaulmoogamide, m. 80-90° (dihydro derivative, m. 78-80°). Ethyleneguanidine-HBr (34 g.) in 240 cc. 10% Na2CO3, treated slowly with 49 g. p-ACNHC6H4SO2Cl (I) in 400 cc. Me2CO, gives 27 g. of the Ac derivative, m. 245°; refluxing 32 g. with 200 cc. 6 N HCl for 1 hr. and addition of NH4OH give 4 g. disulfanilylethyleneguanidine, m. 178-80° (decomposition); it is insol. in alkali and probably has the structure HZNC6H4SO2N.(CH2)2.N(SO2C6H4NH2).C.NH. Glutamic acid (10 g.) and 16 g. I give 8 g. of a product, m. 142° (decomposition); hydrolysis with 6 N HCl (refluxing 0.5 hr.) gives sulfanilylglutamic acid, m. 192-4°; the di-Na salt is amorphous and very soluble in H2O. BrCH2CH2NH2.HBr and I in aqueous Na2CO3 give a precipitate m. 161-4°, hydrolysis of which yields a product m. 69-70°; refluxing with C5H5N in EtOH gives sulfanilylaminoethylpyridinium bromide, m. 218°. Sulfanilylglycine (m. 154°) and BzH in EtOH, refluxed 1 hr., give 4-benzylideneaminophenylsulfonamylglycine, m. 185-6°. 2-Acetoxymercuri-3-hydroxybenzaldehyde and p-HZNC6H4SO2NH2 in AcOH-EtOH on refluxing give (2-acetoxymercuri-3-hydroxybenzylidene)sulfanilamide, yellow, m. 282°. 8-Hydroxyquinoline (44 g.) and 13.3 g. KOH at 180°, treated with 26.2 g. p-ClC6H4NO2 in 2 portions with heating for 1.5 hrs., give 8.4 g. of 8-quinolyl-p-nitrophenyl ether, m. 170°. p-OZNC6H4OPh (7.2 g.), added in small portions to 11 cc. ClSO3H at 10°, the reaction mixture poured into ice, extracted with ether and the extract shaken with 15% NH4OH, gives 5.4 g. of 4-p-nitrophenoxymethanesulfonamide, m. 129°, on heating the ClSO3H solution to 95° for 2 hrs. and treating as above there results 4-p-nitrophenoxymethanesulfonamide, m. 270° (small yield). (4-HZNC6H4)2SO2 (2.5 g.) and 3.7 g. p-OZNC6H4COCl in C5H5N give 3 g. of 4,4'-bis(p-nitrobenzamido)diphenyl sulfone, m. 346°. d-Glutamic acid (II) (19.6 g.) and 69.8 cc. m-MeC6H4NH2, heated for 24 hrs. at 160-70°, give 17 g. of 2-pyrrolidone-5-carboxy-m-toluide (III), m. 147°; addition of 10.9 g. of III in portions to 19.4 cc. ClSO3H and heating 3 hrs. at 50-60°, followed by treatment with concentrated NH4OH, give 4 g. of 1-(2-pyrrolidone-5-carboxamino)-3-methylbenzene-x-sulfonamide, m. 222°. II (25.2 g.), and 115.2 g. 1-ClOH7NH2, heated at 185-90° for 3 hrs., give 19.2 g. of 2-pyrrolidone-5-carboxy-1-naphthalide, m. 207°; in another experiment, after addnl. heating for 8 hrs. at 210°, an isomer, m. 224°, was

L12 ANSWER 38 OF 41 CA COPYRIGHT 2005 ACS ON STN (Continued)
 isolated; these could not be converted into sulfonyl chlorides. Heating 25 g. II and 111 g. p-OZNC6H4NH2 at 160° for 5 hrs. gives 15.6 g. of 2-pyrrolidone-5-carboxy-p-nitroanilide, yellow, m. 225°. 1-2-Pyrrolidone-5-carboxanilide (3 g.) and 5.2 cc. ClSO3H, heated 3 hrs. at 60-70°, give a product m. 173° (decompn.); heating with 2-aminopyridine in dioxane at 95° for 15 min. gives 0.9 g. of 2-[p-(2-pyrrolidone-5-carboxamido)-phenylsulfonamido]pyridine, m. 273°. (4-HZNC6H4)2SO2 (4.61 g.), diazotized in 17% HCl at -7° and coupled with 2-ClOH7OH, gives 7.6 g. of diphenyl-sulfone-4,4'-bisazo-2-naphthol (IV), scarlet, m. 304°; Na salicylate gives the 4,4'-bisazosalicylic acid (V), m. 316° (decompn.). Di-2-pyridyl sulfide di-HBr, m. 274°; oxidation of 1 g. with K2Cr2O7 in AcOH-H2SO4 gives 2,2'-dipyridyl sulfone, m. 216°. Quininic acid (4.3 g.), heated at 100° for 1 hr. with SOCl2 and the product treated with p-HZNC6H4SO2NH2 in C5H5N at 110° for 1 hr., gives 3.8 g. of N4-quinolylsulfanilamide, m. 255°. Antipyrine (10 g.) and 19.4 cc. ClSO3H at -15°, heated at 90° for 1.5 hr. and the resulting product treated with concd. NH4OH, give 3.6 g. of 1-phenyl-2,3-dimethyl-5-pyrazolone-x-sulfonamide, m. 239°; in an attempt to prep. the corresponding sulfonic acid, oxidation gives the sulfonic acid, Cl1H12O4N2S, analyzed as the Na salt. Dihydrochaulmoogric acid, heated with SOCl2 at 90° for 2.5 hrs., the chloride heated on the steam bath with p-HZNC6H4SO2NH2 in C5H5N for 2 hrs. and the resulting solid (7.1 g.) extd. with C6H6, the insol. paste extd. with Me2CO, the filtrate treated with an equal vol. of ether, shaken with charcoal and the latter extd. with EtOH, gives N4-dihydrochaulmoogrylsulfanilamide, m. 208°. NaHSO3 (10.6 g.) in 29 cc. H2O, treated at 80° with 7 cc. formalin and 9.6 g. 2-aminopyridine, gives 11.2 g. of Na 2-aminopyridine-N-methylenebisulfite, with 1.5 moles H2O, m. 282° (decompn.). p-OZNC6H4SOCl (from 6.3 g. acid), treated with 15 cc. EtOH contg. 3.9 cc. of N2H4.H2O, gives 3.4 g. of Et p-nitrobenzenesulfinate, pale yellow, m. 49-51°; Me ester, m. 47°. p-OZNC6H4SOCl and ether-NH3 give p-nitrobenzenesulfenamide, yellow, m. 101-3°. p-OZNC6H4NH2 and p-OZNC6H4SO2Cl in C5H5N, heated for 2 hrs. on the water bath, give 4-nitrobenzenesulfonamide-4'-nitroanilide, yellow, m. 171-3°; 4-OZNC6H4SC6H4NH2-4 gives 4-(p-nitrophenylsulfonamido)-4'-nitrodiphenyl sulfide, pale yellow, m. 190°. Excluding V, none of the 26 substances was sufficiently promising in bacteriol. tests to be worth detailed pharmacol. investigations; IV is inactive, whereas V retains the action of p-HZNC6H4SO2NH2 on the streptococcus and is also as active as sulfaipyridine against the pneumococcus. Substitution in the N4-position of an acyl group or an arylidene group for H led to a decrease in, or disappearance of, activity even when the substituent was a mercurated org. radical known to show marked bactericidal action. Substitution in position N1, on the contrary, causes no diminution in activity so long as a simple monocarboxylic acid residue is the substituent and such substitution is even sufficient to neutralize the disadvantageous effect of acyl substitution in position N4. With a dicarboxylic acid, 1 CO2H group being left free, activity is much reduced and when both are left free, the product is inactive.
 IT 28829-78-9, Benzenesulfonamide, 4-nitro-4'-[p-(nitrophenyl)thio]- (preparation of)
 RN 28829-78-9 CA
 CN Benzenesulfonamide, 4-nitro-4'-[p-(nitrophenyl)thio]- (8CI) (CA INDEX NAME)

L12 ANSWER 38 OF 41 CA COPYRIGHT 2005 ACS ON STN (Continued)

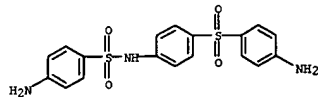


L12 ANSWER 39 OF 41 CA COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 35:37627 CA
 ORIGINAL REFERENCE NO.: 35:58710-1
 TITLE: Chemotherapy. III. Sulfones
 AUTHOR(S): Roblin, Richard O., Jr.; Williams, James H.; Anderson, George W.
 SOURCE: Journal of the American Chemical Society (1941), 63, 1930-4
 CODEN: JACSAT; ISSN: 0002-7863
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB cf. C. A. 34, 6630.6. (The maximum blood levels (m. b. l.) below are in mg./100 cc. for white mice with a dosage of 0.5 g./kg. body weight orally unless otherwise stated.) 4-O2NC6H4Br, 4-AcNHC6H4SO2H and AcOK in cyclohexanol, followed by reduction, give 50% of 4-acetamido-4'-aminodiphenyl sulfone (Raiziss, et al., C. A. 34, 393.9), m. 242-3° (m. ps. corrected), solubility in H2O at 37° 7.1 mg./100 cc., m. b. l. 6.8 (white mice, 0.125 g./kg.), chemotherapeutically active against expl. streptococcal or pneumococcal infection or both in white mice; hydrolysis gives 4,4'-diaminodiphenyl sulfone (I), m. 175°, solubility 36.9 mg., m. b. l. 3.5 (0.063 g./kg.) active. Condensation of I with octanesulfonyl chloride in C5H5N and hydrolysis give 75% of octylsulfonamido-4'-aminodiphenyl sulfone, m. 130°, solubility 0.1 mg., m. b. l. 0.5, inactive; I and AcNHC6H4SO2Cl in C5H5N give 35% of 4-sulfanilamido-4'-aminodiphenyl sulfone, m. 211°, solubility 2.6 mg., m. b. l. 1.5, active. 2,5-Cl(O2N)C6H3SO2NH2 and 4-AcNHC6H4SO2K (II) in 95% EtOH, followed by reduction and hydrolysis, give 60% of 2-sulfamyl-4,4'-diaminodiphenyl sulfone, m. 238°, solubility 10.4 mg., m. b. l. 3, active. 2,5-Cl(O2N)C6H3SO2Et and II in absolute EtOH, followed by reduction and hydrolysis, give 59% of 2-carbethoxy-4,4'-diaminodiphenyl sulfone, m. 182-3°, solubility 6.5 mg., m. b. l. 1, inactive; the free acid, with 1.5 moles of EtOH of crystallization, m. 108-13°, solubility 422.5 mg., m. b. l. 0.8, inactive. 2-O2NC6H4Br, 4-AcNHC6H4SO2H and AcOK in cellosolve, followed by reduction and hydrolysis, give 83% of 2,4'-diaminodiphenyl sulfone, m. 117°, solubility 19.5 mg., m. b. l. 5.9, inactive. 4,3-Br(O2N)C6H3SO2NH2 and II in absolute EtOH, followed by hydrolysis, give 95% of 4-sulfamyl-2-nitro-4'-aminodiphenyl sulfone, m. 223-5°, solubility 3.1 mg., m. b. l. 3.5 (subcutaneous), slightly active; reduction gives the corresponding 2,4'-diamino derivative, m. 206-7°, solubility 10.7 mg., m. b. l. 5.8 (subcutaneous), inactive. 4-O2NC6H4Cl and PhSO2K in carbitol, followed by reduction, give 46% of 4-aminodiphenyl sulfone, m. 176°, solubility 8.8 mg., m. b. l. 5.2 (0.25 g./kg.), slightly active. 2-Bromopyridine and II in carbitol, with hydrolysis with 12% HCl, give 66% of 4-aminophenyl 2-pyridyl sulfone, m. 158-60°, solubility 72.8 mg., m. b. l. 12.7, active; 4-chloropyridine and II in H2O, followed by hydrolysis, give 53% of the 4-pyridyl isomer, m. 269-71°, solubility 3 mg., m. b. l. 2.1, inactive. 2-Bromothiazole and II in carbitol with subsequent hydrolysis give 63% of 4-aminophenyl 2-thiazyl sulfone, m. 149-51°, solubility 30.1 mg., m. b. l. 10, inactive. 2-Chloro-5-nitropyridine and II in absolute EtOH, followed by hydrolysis, give 85% of 4-aminophenyl 5-nitro-2-pyridyl sulfone, m. 169-71°, solubility 11.4 mg., m. b. l. 2.9, slightly active; reduction gives the 5-amino derivative, m. 186-7°, solubility 123 mg., m. b. l. 9.1, active. The pharmacol. properties of some of the compds. are discussed.
 IT 84907-42-6, Sulfanilamide, 4'-sulfanilyl-

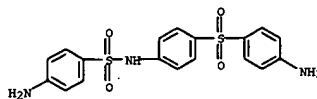
L12 ANSWER 40 OF 41 CA COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 35:33567 CA
 ORIGINAL REFERENCE NO.: 35:5258d-f
 TITLE: Aminophenyl sulfonamidophenyl sulfones
 INVENTOR(S): Williams, James H.
 PATENT ASSIGNER(S): American Cyanamid Co.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2240383		19410429	US	<--

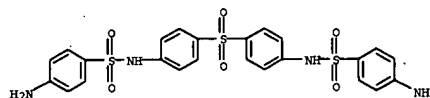
GI For diagram(s), see printed CA issue.
 AB Compds. of the general formula in which R is an alkyl or aryl radical, X is H, NH4 or a metal and n is a small whole number, may be prepared in good yield by the reaction of p-acylamino-phenyl p-aminophenyl sulfones with alkyl, aryl or heterocyclic sulfonyl chlorides, followed by deacylation. These compds. are the S analogs of monoacylated diaminodiphenyl sulfones which have high therapeutic activity against various bacterial infections such as those due to pneumococci, streptococci, and the like and are much less toxic than the monoacylated diaminodiphenyl sulfones. Details are given of the preparation of p-aminophenyl p-octylsulfonamidophenyl sulfone, m. 130°, and p-aminophenyl p-sulfanilamidophenyl sulfone, m. 211°.
 IT 84907-42-6, Sulfanilamide, 4'-sulfanilyl- (preparation of)
 RN 84907-42-6 CA
 CN Benzenesulfonamide, 4-amino-N-[4-[(4-aminophenyl)sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



L12 ANSWER 39 OF 41 CA COPYRIGHT 2005 ACS ON STN (Continued)
 (prepn. of)
 RN 84907-42-6 CA
 CN Benzenesulfonamide, 4-amino-N-[4-[(4-aminophenyl)sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



L12 ANSWER 41 OF 41 CA COPYRIGHT 2005 ACS ON STN
 ACCESSION NUMBER: 32:66213 CA
 ORIGINAL REFERENCE NO.: 32:9299e-f
 TITLE: A pharmacological study of factors influencing the isolated melanophores of Fundulus heteroclitus
 AUTHOR(S): Boydanovitch, Sinisha B.
 SOURCE: Archives Internationales de Pharmacodynamie et de Therapie (1938), 59, 227-31
 CODEN: AIPTAK; ISSN: 0003-9780
 DOCUMENT TYPE: Journal
 LANGUAGE: Unavailable
 AB The melanophores of Fundulus heteroclitus are expanded by atropine, pilocarpine and physostigmine, and contracted by adrenaline, acetylcholine, mechoyl and deuterium oxide. With various combinations of these drugs, results were obtained suggesting that more than one nervous mechanism is involved. Adrenergic and cholinergic action, though both cause contraction, can be differentiated by ergotamine and atropine.
 IT 14168-07-1, Sulfanilamide, 4',4'''-sulfonylbis- (preparation of)
 RN 14168-07-1 CA
 CN Benzenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[4-amino- (9CI) (CA INDEX NAME)



10/810,325

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L13 362 L5 NOT L12

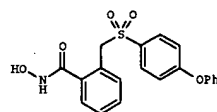
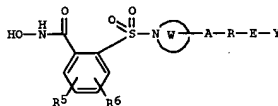
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10/810,325

L13 ANSWER 1 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 138:304308 CA
 TITLE: Preparation of sulfonyl aryl hydroxamates and their use as matrix metalloproteinase inhibitors
 INVENTOR(S): Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Decrescenzo, Gary A.; Freskos, John N.; Getman, Daniel P.; McDonald, Joseph J.; Mischke, Brent V.; Rao, Shashidhar N.; Villamil, Clara I.
 PATENT ASSIGNEE(S): Pharmacia Corp., USA
 SOURCE: U.S. Pat. Appl. Publ., 148 pp., Cont.-in-part of U.S. Ser. No. 569,034.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 10
 PATENT INFORMATION:

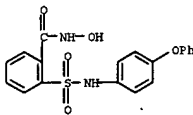
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003073845	A1	20030417	US 2001-909227	20010719
US 6696449	B2	20040224		
WO 9838859	A1	19980911	WO 1998-US4300	19980304
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RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 2001020021	A1	20010906	US 1999-230209	19990624
US 6380258	B2	20020430		
US 2003191317	A1	20031009	US 2000-728408	20001201
US 6794511	B2	20040921		
CA 2453613	AA	20030130	CA 2002-2453613	20020719
WO 2003007954	A2	20030130	WO 2002-US23219	20020719
WO 2003007954	A3	20031023		
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, HL, HR, NE, SN, TD, TG				
EP 1406626	A2	20040414	EP 2002-761148	20020719
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BR 2002011430	A	20040713	BR 2002-11430	20020719
JP 2005502632	T2	20050127	JP 2003-513561	20020719
PRIORITY APPLN. INFO.:			US 1997-35182P	P 19970304
			WO 1998-US4300	W 19980304
			US 1999-310813	B1 19990512
			US 1999-310813	B2 19990512
			US 1999-230209	AZ 19990624
			US 2000-569034	A2 20000511

L13 ANSWER 1 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)
 US 2000-728408 A2 20001201
 US 2001-909227 A 20010719
 WO 2002-US23219 W 20020719
 OTHER SOURCE(S): MARPAT 138:304308
 GI



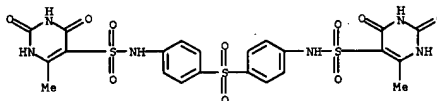
AB Title compds. I [W = 6-membered heterocycle containing the sulfonyl bonded N]
 A-R-E-Y = 4-substituent; A = O, SOO-2, etc.; R = alkyl, alkoxyalkyl, aryl, heteroaryl, cycloalkyl, etc.; E = absent, bond, CO, SO2, etc.; Y = absent, H, OH, CN, NO2, alkyl, haloalkyl, aminoalkyl; R5-6 = together with the atoms to which they are bonded, form an aliphatic or aromatic carbocyclic or heterocyclic ring having 5-7 members] are prepared Over 50 synthetic examples are disclosed. For example, phthalide is reacted with 4-(phenoxy)benzenethiol (DMF, K2CO3, 100°C, 2 h) and the resulting product converted to the hydroxamic acid (CH2Cl2, ClCOCOC1, DMF (cat), TMSOH2, 0°C, 1.5 h) followed by oxidation (CH2Cl2, mCPBA, room temperature, 3 h) to II. II has IC50 = 10 nM for MMP-2, 45 nM for MMP-13 and >10,000 nM for MMP-1. I are inhibitors of MMP and angiogenesis.
 IT RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (use of sulfonyl aryl or heteroaryl hydroxamic acids and derivs. as aggreganase inhibitors)
 RN 308385-50-4 CA
 CN Benamide, N-hydroxy-2-[[[4-(phenoxyphenyl)amino]sulfonyl]- (9CI) (CA INDEX NAME)

L13 ANSWER 1 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



L13 ANSWER 2 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 133:291134 CA
 TITLE: Diutsifon for treating systemic scleroderma
 INVENTOR(S): Nikonova, L. V.; Reznik, V. S.
 PATENT ASSIGNEE(S): Kazanskii Meditsinskii Universitet, Russia
 SOURCE: Russ. From: Izobreteniya 1998, (2), 180.
 CODEN: RUXXE7
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2102091	C1	19980120	RU 1995-116472	19950919
PRIORITY APPLN. INFO.:			RU 1995-116472	19950919
AB Title only translated.				
IT 34941-71-4, Diutsifon				
RL: RAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Diutsifon for treating systemic scleroderma)				
RN 34941-71-4 CA				
CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)				



10/810,325

L13 ANSWER 3 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:

132:146184 CA

Synthesis of hydroxybenzenesulfonanilides against
parasite *Fasciola hepatica* and their uncoupling
activity for oxidative phosphorylation in rat liver
mitochondria

AUTHOR(S):

Wang, Xiaojing; Chen, Jing; Zhao, Jun; Li, Zhe; Xin,
Min

CORPORATE SOURCE:

Department of Chemistry, Neimonggol University,
Hohhot, 010021, Peop. Rep. China

SOURCE:

Huaxue Yanjiu Yu Yingyong (1999), 11(4),
422-424

PUBLISHER:

Huaxue Yanjiu Yu Yingyong Bianjibu

DOCUMENT TYPE:

Journal

LANGUAGE:

Chinese

AB The 8 substituted hydroxybenzenesulfonanilides were synthesized. The
decoupling action of these compds. for oxidative phosphorylation in rat
liver mitochondria were studied. The decoupling activities were measured
by measuring stimulation of state 4 respiration and measuring the increase
of Pi in reaction medium.

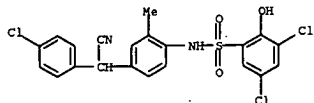
IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis of hydroxybenzenesulfonanilides against parasite *Fasciola*
hepatica and their uncoupling activity for oxidative phosphorylation in
rat liver mitochondria)

RN

258263-21-7 CA
CN Benzenesulfonamide, 3,5-dichloro-N-[(4-chlorophenyl)cyanomethyl]-2-
methylphenyl-2-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 5 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:

132:122340 CA

Synthesis and biological screening of some novel
sulfonamides and arylsulfonates

AUTHOR(S):

Bhatt, Akhil H.; Parekh, H. H.; Parikh, A. R.

CORPORATE SOURCE:

Chemistry Department, Saurashtra University, Rajkot,
360005, India

SOURCE:

Journal of the Institution of Chemists (India) (

1999), 71(1), 21-23

CODEN: JOICA7; ISSN: 0020-3254

PUBLISHER:

Institution of Chemists (India)

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Some new sulfonamides and arylsulfonates have been prepared. The products
were screened for their antimicrobial and antimycobacterial activity. All
the compds. showed moderate activity.

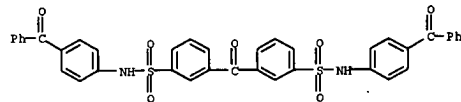
IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological
study); PREP (Preparation)

(preparation and antibacterial and antimycobacterial activity of
sulfonamides and arylsulfonates)

RN

256382-92-0 CA
CN Benzenesulfonamide, 3,3'-carbonylbis[N-(4-benzoylphenyl)- (9CI) (CA INDEX
NAME)



REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:

132:133340 CA

Approach to predicting the toxicity of chemical
substances

AUTHOR(S):

Zul'karnae, T. R.; Tyurina, L. A.; Solominova, T. S.;

Novikov, S. M.; Kosheleva, O. M.; Kirilan, S. A.

CORPORATE SOURCE:

Bashkirskii Gos. Med. Univ., Ufa, Russia

SOURCE:

Gigiena i Sanitariya (1999), (3), 54-61

CODEN: GISAAA; ISSN: 0016-9900

PUBLISHER:

Meditsina

DOCUMENT TYPE:

Journal

LANGUAGE:

Russian

AB A method is proposed for predicting acute toxicity of chemical compds. which
is based on the complex hierarchic dichotomous model; examples are given
of its application. The proposed approach is related to acute toxicity,
directed to LD50 values. Seven models were incorporated for sequential
toxicol. classification of materials.

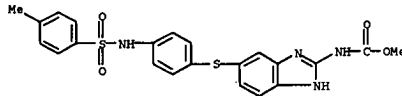
IT

RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL
(Biological study)

(approach to predicting toxicity of chemical substances)

RN

256921-80-9 CA

CN Carbamic acid, [5-[[[4-[(4-methylphenyl)sulfonyl]amino]phenyl]thio]-1H-
benzimidazol-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

L13 ANSWER 6 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:

132:49889 CA

Preparation of benzamide thioesters, disulfides,
benzothiazolones, and related compounds as

INVENTOR(S):

Turpin, Jim A.; Song, Yongsheng; Inman, John K.;

Huang, Mingjun; Wallqvist, Anders; Maynard, Andrew;

Covell, David G.; Rice, William G.; Appella, Ettore

PATENT ASSIGNEE(S):

United States of America, Department of Health and

Human Services, USA

SOURCE:

PCT Int. Appl., 82 pp.

CODEN: PIXKD2

DOCUMENT TYPE:

Patent

LANGUAGE:

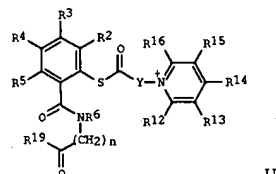
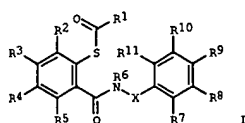
English

FAMILY ACC. NUM. COUNT:

1

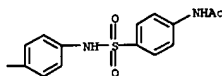
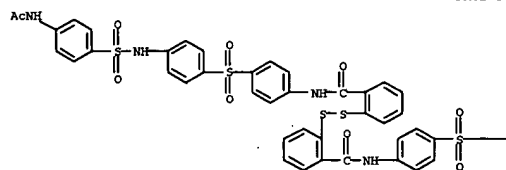
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9965871	A2	19991223	WO 1999-US13856	19990618 <--
WO 9965871	A3	20001123		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2335464	AA	19991223	CA 1999-2335464	19990618 <--
AU 9946972	A1	20000105	AU 1999-46972	19990618
AU 763729	B2	20000731		
BR 9911385	A	20010313	BR 1999-11385	19990618
EP 1087941	A2	20010404	EP 1999-930428	19990618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002518370	T2	20020625	JP 2000-554698	19990618
US 6706729	B1	20040316	US 2001-701451	20010516
US 2004132785	A1	20040708	US 2003-738062	20031216
PRIORITY APPLN. INFO.:				
WO 1999-US13856 P 19990619				
US 2001-701451 A1 20010516				
OTHER SOURCE(S):				
MARPAT 132:49889				
GI				



AB Title compds., e.g., [I, II; X = null, alkyl, (substituted) aryl; R1 = YZ, (substituted) alkyl, aryl, aralkyl, etc.; Y = (CH2)_n, C6H4CH2, C6H4NHC(=O)CH2, CH2NHC(=O)CH2, etc.; Z = dialkyl- or aryl- or alkylarylsulfonium, trialkyl- or aryl-, or alkylarylammonium, etc.; R2 = H, Me, CONH2, CO2Me; R3-R5 = H, halo, NO2, CO2Me, CO2NH2; R6 = H, Me, (substituted) alkyl, aryl, aralkyl; R7-R11 = H, except that either R7, R8, or R9 can = SO2G; G = NH2, alkylimino, arylimino, acylimino, nitroaryl, arylaminoalkyl, etc.; R12-R16 = H, (substituted) CONH2; R19 = OH, (substituted) NH2, ester group], were prepared. Thus, N-[2-(5-pyridiniovaleroylthio)benzoyl]-3-aminopropionamide bromide was prepared in several steps from 2,2'-dithiobenzoyl chloride and β-alaninamide hydrochloride. Pyridinioalkyl thioesters did not inhibit HIV-1 integrase, reverse transcriptase, or protease but did promote Zn ejection from Ncp7 protein.

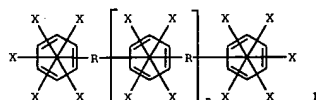
IT 221119-80-8
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of benzamide thioesters, disulfides, benzisothiazolones, and related compds. as inactivators of zinc finger containing retroviruses)
 RN 221119-80-8 CA
 CN Benzamide, 2,2'-dithiobis[N-4-[[4-[[[4-(acetylamino)phenyl]sulfonyl]amino]phenyl]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)



ACCESSION NUMBER: 132:42829 CA
 TITLE: Positively-working photosensitive polyimide precursor composition and formation of relief pattern using the composition
 INVENTOR(S): Okaba, Kaori; Fujieda, Nagatoshi
 PATENT ASSIGNEE(S): Hitachi Chemical Du Pont Micro System Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JIKOAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

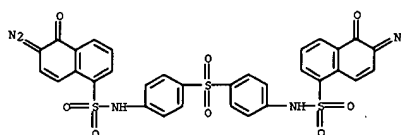
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11338143	A2	19991210	JP 1998-139626	19980521 <--
PRIORITY APPL. INFO.:			JP 1998-139626	19980521

GI



AB The title composition contains a 5-60%-imidized polyamic acid, a naphthoquinonediazide compound, and a phenolic OH-containing compound I (n = 0-3).
 X = H, OH, amino, monovalent organic group; 21 of X in 1 aromatic ring is OH; R = single bond, divalent aliphatic group). The composition is applied on a substrate, dried, patternwise irradiated with an active beam, developed with an aqueous alkali solution, and heated to form a relief pattern. The composition shows high sensitivity toward i-line and improved developability and provides a high resolution relief pattern. The composition is suitable for semiconductor device fabrication.

IT 125677-73-8P
 RL: IMP (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (pow. working photoresist containing partially imidized polyamic acid, naphthoquinonediazide, and phenolic compound for relief patterning)
 RN 125677-73-8 CA
 CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



10/810,325

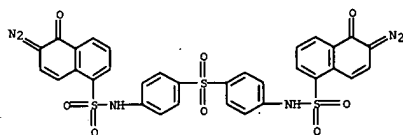
L13 ANSWER 8 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 132:28672 CA
 TITLE: Positive-working photoresist compositions and manufacture of electric devices thereof
 INVENTOR(S): Yamazaki, Noriyuki
 PATENT ASSIGNEE(S): Hitachi Chemical Du Pont Micro System Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11338154	A2	19991210	JP 1998-149945	19980529 <--
PRIORITY APPLN. INFO.: JP 1998-149945 19980529				

AB The comps. contain (A) alkaline solution-soluble polyimides, polyoxazoles, or their precursors, (B) o-quinonediazides, and (C) photoacid generators. A may be a polyimide precursor with repeating units C(O)R1(CO2R3)2C(O)NHR2NH (R1 = tetraivalent organic group; R2 = carboxyl, phenolic OH-containing divalent organic group; R3 = monovalent organic group). The manufacturing process of elec. devices, especially semiconductor devices, involves forming interlayer dielec. films or surface protection films with the comps. The photoresists have excellent sensitivity to i-rays and give films having good solubility of exposed sites and insoly. of unexposed sites.

IT 125677-73-8, 4,4'-Diaminodiphenylsulfone naphthoquinone-1,2-diazido-5-sulfonyl chloride ester (1:2)
 RI: TEM (Technical or engineered material use); USES (Uses)
 (photoacid generator; pos.-working photoresist comps. and manufacture of elec. devices thereof)

RN 125677-73-8 CA
 CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



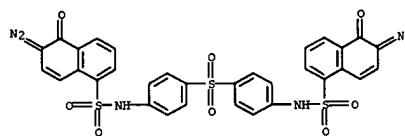
L13 ANSWER 9 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 132:28666 CA
 TITLE: Positive-working photosensitive resin compositions and formation of relief patterns thereof
 INVENTOR(S): Sasaki, Mamoru
 PATENT ASSIGNEE(S): Hitachi Chemical Du Pont Micro System Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11338157	A2	19991210	JP 1998-149944	19980529 <--
PRIORITY APPLN. INFO.: JP 1998-149944 19980529				

AB The comps. contain (A) acid group-containing polymers, preferably polyimide or polyoxazole precursors, (B) photoacid generators, and (C) OCN(CH2)aSiR3-m(OR')m (a = 1-10, R, R' = C1-5 alkyl, m = 0-3). A may be a polyamic acid esters with repeating units C(O)R1(CO2R3)2C(O)NHR2NH (R1 = tetraivalent organic group; R2 = carboxyl, phenolic OH-containing divalent organic group; R3 = monovalent organic group). Formation process of relief patterns with the comps. is also claimed. The photoresists are especially suitable for protection films and interlayer dielec. films for semiconductor devices.

IT 125677-73-8, 4,4'-Diaminodiphenylsulfone naphthoquinone-1,2-diazido-5-sulfonyl chloride ester (1:2)
 RI: TEM (Technical or engineered material use); USES (Uses)
 (photoacid generator; pos.-working photoresist comps. and manufacture of elec. devices thereof)

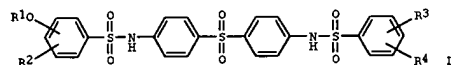
RN 125677-73-8 CA
 CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 10 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 131:293334 CA
 TITLE: Thermal recording material providing durable image
 INVENTOR(S): Tomimaga, Nobuhide; Oya, Keiji; Shigeno, Koichi
 PATENT ASSIGNEE(S): Asahi Denka Kogyo K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11286175	A2	19991019	JP 1998-107083	19980402 <--
PRIORITY APPLN. INFO.: JP 1998-107083 19980402				

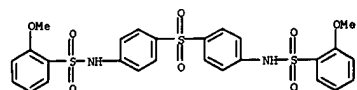
OTHER SOURCE(S): MARPAT 131:293334
 GI



AB The title material contains a diphenylsulfone derivative I (R1 = C1-8 alkyl, Ph; R2-4 = H, halo, PhO, NO2, C1-8 alkyl, alkoxy) as a color developer in the heat-sensitive layer. The material provides storage-stable images with high d. without background fog.

IT 246537-83-7
 RI: TEM (Technical or engineered material use); USES (Uses)
 (storage-stable thermal recording material containing diphenylsulfone as color developer)

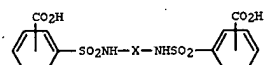
RN 246537-83-7 CA
 CN Benzenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[2-methoxy- (9CI) (CA INDEX NAME)



L13 ANSWER 11 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 131:264839 CA
 TITLE: Thermosensitive recording material
 INVENTOR(S): Hayakawa, Kunio; Morita, Mitsunobu
 PATENT ASSIGNEE(S): Ricoh Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11277906	A2	19991012	JP 1998-98152	19980327 <--
PRIORITY APPLN. INFO.: JP 1998-98152 19980327				

OTHER SOURCE(S): MARPAT 131:264839
 GI

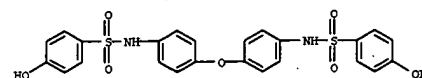


AB In the title recording material having a heat-sensitive recording layer containing a leuco dye and a developer, 21 compound containing 22 aromatic sulfonyl groups having an acidic functional group as the substituent

I (x = divalent group) is contained. An under coat layer containing spherical hollow plastic particle is placed between the support and the heat-sensitive recording layer. The invention recording material shows superior resistance to oil and plasticizer and heat, and shows high image storage stability.

IT 52692-07-6
 RI: MOA (Modifier or additive use); USES (Uses)
 (contained in recording layer for thermosensitive recording material)

RN 52692-07-6 CA
 CN Benzenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[4-hydroxy- (9CI) (CA INDEX NAME)



10/810,325

L13 ANSWER 12 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 131:264793 CA
 TITLE: Material having hydrophilic and hydrophobic parts, its manufacture, and printing apparatus using water-thinned ink therefrom
 INVENTOR(S): Sasaki, Hiroshi; Shoji, Mitsuyoshi; Kawashima, Kenichi; Ito, Yutaka
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

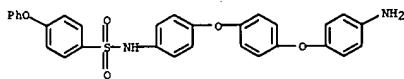
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11265058	A2	19990928	JP 1998-67446	19980317 <--
JP 3340377	B2	20021105		

PRIORITY APPL. INFO.: MARPAT 131:264793

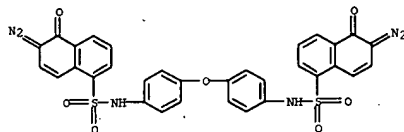
AB The material is characterized by that a material of which surface has water contact angle $\geq 150^\circ$, preferably a perfluoralkyl polyether, is applied thereon parts with water contact angle $80-130^\circ$ by light exposure and then bonded or adhered thereon with a material having water contact angle $\leq 70^\circ$, preferably an oxyallane. A manufacturing method of the material, a letterpress printing apparatus using the material, and a convexo-concave surface forming method are also claimed. The material shows high water repellency.

IT 208183-16-8P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (manufacture of material having surface with hydrophilic and hydrophobic parts and printing plates using water-thinned ink)

RN 208183-16-8 CA
 CN Benzenesulfonamide, N-[4-(4-(4-aminophenoxy)phenoxy)phenyl]-4-phenoxy- (9CI) (CA INDEX NAME)



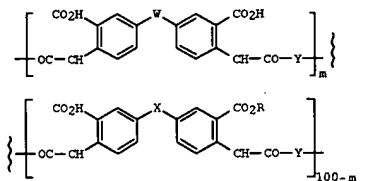
L13 ANSWER 13 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)
 (manuf. of electronic device including formation of relief pattern by imidation of developed image made of pos. working photosensitive polyamic acid compn.)
 RN 125677-72-7 CA
 CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 13 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 131:164292 CA
 TITLE: Positively working photosensitive polymer composition, varnish of the composition, and electronic device manufactured by using the varnish
 INVENTOR(S): Okabe, Yoshiaki; Maegawa, Yasunari; Mitsuwa, Takao; Ueno, Takumi
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11212258	A2	19990806	JP 1998-12404	19980126 <--
			JP 1998-12404	19980126

PRIORITY APPL. INFO.: GI



AB The pos.-working photosensitive composition contains polyamic acid-polyamic acid ester I [W, X = SO, SO2, CO, C(CF3)2; Y = divalent organic group forming aromatic diamine; m = 15-85 (mole %); R = C1-4 alkyl] and a photosensitive agent mixture comprising Phn[ZnHC(O)NHT(DN)q]p and A(DN)q (2, A = Ph, benzyl; T = phenylene, alkylene, DNQ = 1,2-naphthoquinone-2-diazo-5-sulfonyloxy, 1,2-naphthoquinone-2-diazo-5-sulfonylamino; n = 0, 1; p, q = 1-3). The varnish consists of the polyamic acid-polyamic acid ester, 5-40 weight% (based on the polymer) quinonediazide mixture, and an organic solvent and the resin concentration in the varnish is 5-45 weight%. The electronic device is manufactured by using the varnish by applying on a substrate, prebaking, exposing through a photomask, developing with aqueous alkali, and imidating under heating to form a pos. relief pattern. Passivation films, interlayer insulator films, etc., can be formed without etching process.

IT 125677-72-7P
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

L13 ANSWER 14 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 131:122984 CA
 TITLE: Positive-working photosensitive resin composition and relief pattern formation using same
 INVENTOR(S): Sasaki, Mamoru; Nunomura, Masataka; Ohe, Tadayuki; Anzai, Takanori; Uchimura, Shunichiro
 PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11174679	A2	19990702	JP 1997-339817	19971210 <--
			JP 1997-339817	19971210

AB The title resin composition contains photoacid generator and a mixture of 2 kinds

of polyimide precursors having CO2H or phenolic OH group which have a dissoln. rate ratio to aqueous alkali solns. of 25. The composition is coated on a substrate, dried, exposed to active ray, developed with an aqueous

alkali solution, and heat-treated to form a relief pattern. The composition shows

high sensitivity toward active ray such as i-line and provides a high quality relief pattern using aqueous alkali solns.

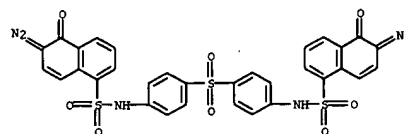
IT 125677-73-8, 4,4'-Diaminodiphenylsulfone naphthoquinone-1,2-diazo-5-sulfonyl chloride ester (1:2)

RL: TEM (Technical or engineered material use); USES (Uses)

(photoacid generator; photoresist composition containing alkali dissoln. rate-controlled polyimide precursors)

RN 125677-73-8 CA

CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



10/810,325

L13 ANSWER 15 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 131:122983 CA
 TITLE: Positive-working photosensitive resin composition and relief pattern formation using same
 INVENTOR(S): Sasaki, Mamoru; Nunomura, Masataka; Ohe, Tadayuki; Uchimura, Shunichiro
 PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JXKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

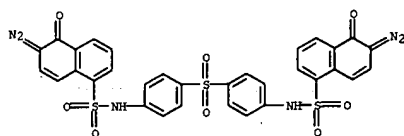
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11174678	A2	19990702	JP 1997-339816	19971210 <--
JP 3436673	B2	20030811		

PRIORITY APPL. INFO.: JP 1997-339816 19971210
 AB The title resin composition contains a polyamic acid ester having a repeating unit NHCOR1(CO2R2)(CO2R3)CONHR4 (R1 = tetravalent organic group; R2, R3 = hydrocarbon group; R4 = divalent organic group having 21 phenolic OH or CO2H group) and a photoacid-generator and the dissoln. rates to aqueous alkali solution of the film made of the composition are ≤ 30 and ≥ 80 nm/s before and after irradiation with active ray at 700 mJ/m², resp. The composition is coated on a substrate, dried, exposed to active ray, developed

with an aqueous alkali solution, and heat-treated to form a relief pattern. The composition shows high sensitivity toward active rays and provides a high quality relief pattern using aqueous alkali solns.

IT 125677-73-8
 RL: TEM (Technical or engineered material use); USES (Uses) (acid generator; pos. photoresist composition containing polyamic acid ester and acid generator)

RN 125677-73-8 CA
 CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



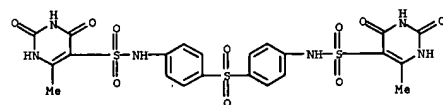
L13 ANSWER 17 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 131:97171 CA
 TITLE: Effect of pyrimidine derivatives on adenylate cyclase system of immunocompetent cell regulation in vitro
 AUTHOR(S): Slabunov, Yu. D.; Cherepnev, G. V.; Karimova, F. G.; Garaev, R. S.
 CORPORATE SOURCE: Research Department, Republican Medical Diagnostic Center, Kazan, Russia
 SOURCE: Bulletin of Experimental Biology and Medicine (Translation of Byulleten Eksperimental'noi Biologii i Meditsiny) (1998), 125(6), 588-590
 CODEN: BEXBAN; ISSN: 0007-4888
 PUBLISHER: Consultants Bureau
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The pyrimidine derivs. rymedone and diucifone decrease the activity of adenylate cyclase, as shown in expts. on thymocytes and lymphocytes of guinea pig lymph nodes and human peripheral blood lymphocytes. Inhibition of the enzyme depends on the subpopulation and species appartenance of immunocompetent cells. The relationship between the results and effects of pyrimidine derivs. in experiment and clin. setting is discussed.

IT 34941-71-4, Diucifone
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effect of pyrimidine derivs. on adenylate cyclase system of immunocompetent cell regulation in vitro)

RN 34941-71-4 CA
 CN 5-Pyrimidinesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[1,2,3,4-tetrahydro-6-methyl-2,4-dioxo- (9CI) (CA INDEX NAME)



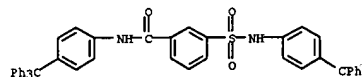
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 131:102270 CA
 TITLE: Size complementarity of macrocyclic cavities and stoppers in amide-rotaxanes
 AUTHOR(S): Hein, Christiane; Affeld, Ansgar; Nieger, Martin; Vogtle, Fritz
 CORPORATE SOURCE: Kekule-Institut Organische Chemie Biochemie, Univ. Bonn, Bonn, D-53121, Germany
 SOURCE: Helvetica Chimica Acta (1999), 82(5), 746-759
 CODEN: HCACAV; ISSN: 0018-019X
 PUBLISHER: Verlag Helvetica Chimica Acta
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 131:102270

AB New [2]rotaxanes were prepared by the threading and the slipping procedure, the latter having the advantage of not needing templating interactions. As a consequence, the first [2]rotaxane consisting of a tetraamide macrocycle and a pure hydrocarbon thread was synthesized. Sterically matching wheels and axles being the basic requirement of a successful slipping approach to rotaxanes, mono- and bis-homologous wheels were synthesized and mech. connected to amide axles which were stoppered with blocking groups of different spatial demand. The deslipping kinetics of the resulting rotaxanes were measured and compared. It emerges that even slight increases in the wheel size require larger stoppers to stabilize the mech. bond. Moreover, when the deslipping rate of a rotaxane with amide wheel and amide axle was determined in either DMF or THF, a strong dependence on the solvent polarity, which is caused by a differing extent of intramol. H-bonds between the wheel and the axle, was observed. As expected, no such dependence was detected for a rotaxane with amide wheel and hydrocarbon axle whose components cannot interact via H-bonds. The comparison of the sterically matching pairs of macrocycles and blocking groups, found by a systematic fitting based on the results of slipping and deslipping expts., with other rotaxane types bearing similar stoppers allows conclusions concerning the relative cavity size of wheels of various structure.

IT RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process) (Preparation and slipping/deslipping kinetics of amide rotaxanes)

RN 177083-12-4 CA
 CN Benzamide, N-(4-(triphenylmethyl)phenyl)-3-[[[4-(triphenylmethyl)phenyl]amino]sulfonyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 18 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 131:73558 CA
 TITLE: Preparation of chromansulfonamides as β -3 adrenoceptor agonists
 INVENTOR(S): Ladouceur, Gaetan H.; Connell, Richard D.; Baryza, Jeremy; Campbell, Ann-Marie; Lease, Timothy G.; Cook, James H.
 PATENT ASSIGNEE(S): Bayer Corporation, USA
 SOURCE: PCT Int. Appl., 95 pp.
 CODEN: P1XXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9932475	A1	19990701	WO 1998-US24627	19981117 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, BG, KZ, MD, RU, TJ, TH, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CH, CA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9810489	A	19990520	ZA 1998-10489	19981117 <--
CA 2314925	AA	19990701	CA 1998-2314925	19981117 <--
AU 9914183	A1	19990712	AU 1999-14183	19981117 <--
AU 751015	B2	20020808		
EP 1054881	A1	20001129	EP 1998-958070	19981117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001526281	T2	20011218	JP 2000-525412	19981117
TW 502032	B	20020911	TW 1998-87118968	19981117
US 6051586	A	20000418	US 1998-199014	19981123
US 2003073839	A1	20030417	US 2000-520201	20000307
US 2004072843	A1	20040415	US 2003-667286	20030919
US 6903218	B2	20050607		

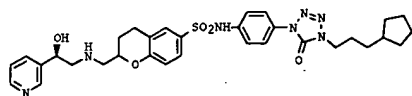
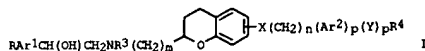
PRIORITY APPL. INFO.:
 US 1997-994585 A 19971219
 US 1997-1220612 P 19971219
 WO 1998-US24627 W 19981117
 US 1998-199014 A3 19981123
 US 2000-520201 B1 20000307

OTHER SOURCE(S): MARPAT 131:73558
 GI

10/810,325

L13 ANSWER 18 OF 362 CA COPYRIGHT 2005 ACS on STN

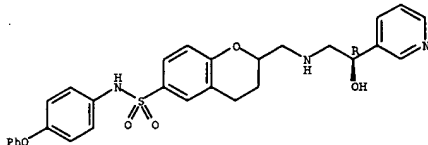
(Continued)



AB Title compds. [1: R = H, OH, O, halo, haloalkyl, alkyl, cyano, NO₂, N(R1)2, SR1, OR1, SO₂R2, CO₂R2, COR2, NR1SO₂R2, NR1COR2; R1 = H, (substituted) alkyl, cycloalkyl, Ph, naphthyl; R2 = R1, N(R1)2; R3 = H, alkyl, R1CH(OH)CH₂; Ar1 = Ar1OCH₂, Ph, (fused) heterocyclyl; m = 1-3; n = 0-4; X = piperazinylsulfonyl, NR3SO₂; Ar2 = (substituted) (fused) Ph, heterocyclyl; Y = OY, NR1, NR1CO, (oxo-substituted) cycloalkyl, heterocyclyl; p = 0, 1; R4 = H, R1, R2, oxo, (substituted) heteroalkyl, alkyl, haloalkyl], were prepared for treatment of diabetes and obesity (no data). Thus, (R) (pyrid-3-yl)oxirane (preparation given) and 2-aminoethylchroman-6-sulfonic acid [4-[4-(3-cyclopentylpropyl)-5-oxo-4,5-dihydro-1H-tetrazol-1-yl]phenyl]amide (preparation given) were refluxed in EtOH/H₂O to give 11% title compound (II).

IT 228709-93-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of chromansulfonamides as β-3 adrenoceptor agonists)
RW 228709-93-1 CA
CN 2H-1-Benzopyran-6-sulfonamide, 3,4-dihydro-2-[[[(2R)-2-hydroxy-2-(3-pyridinyl)ethyl]amino]methyl]-N-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

L13 ANSWER 19 OF 362 CA COPYRIGHT 2005 ACS on STN

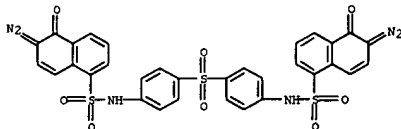
ACCESSION NUMBER: 131:65895 CA
TITLE: Positive-working photosensitive polyimide precursor and relief pattern formation using it
INVENTOR(S): Okaba, Kaori; Fujieda, Nagatoshi; Watanabe, Naoki
PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKKXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11153868	A2	19990608	JP 1997-318081	19971119 <-
PRIORITY APPL. INFO.: JP 1997-318081 19971119				

AB The polyimide precursor composition comprises a polyamic acid with imidation degree 5-60% and a compound generating acid by light. The relief pattern is formed by coating the composition on a substrate, drying, irradiating, developing with an aqueous alkaline solution, and heat-treating. The composition is sensitive to i-ray, developable with aqueous alkaline solution even when the layer is thick, and gives clear relief patterns.

IT 125677-73-8
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist composition containing imidation degree-controlled polyamic acid and photo-acid generator)

RN 125677-73-8 CA
CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)

L13 ANSWER 18 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 20 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 131:51984 CA
TITLE: Silver halide photographic material to be processed with developer not containing primary aromatic amine
INVENTOR(S): Ishidai, Keiko; Kaneko, Yutaka
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 62 pp.
CODEN: JKKXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

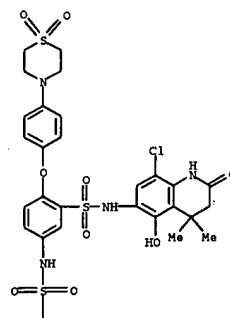
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11153851	A2	19990608	JP 1998-12603	19980126 <-
PRIORITY APPL. INFO.: JP 1997-252076 A 19970917				

OTHER SOURCE(S): MARPAT 131:51984

AB The silver halide photog. material contains a reducing agent R1-NH-NH-X-R2 (R1 = aryl, heterocycle; R2 = alkyl, alkenyl, alkynyl, aryl, heterocycle; X = -SO₂-, -COCO-, -CO-O-, etc.) for color development and a coupler A-L1-Q1 (A = coupler residual group, L1 = divalent connecting group; Q1 = heterocycle, aryl oxy, alkyl, phosphoryl) in a light sensitive layer. The photog. material provides the increased color image stability against heat and light.

IT 227619-90-1
RL: TEM (Technical or engineered material use); USES (Uses)
(coupler for silver halide photog. material)

RN 227619-90-1 CA
CN Benzenesulfonamide, 2-butoxy-N-(3-[[[(8-chloro-1,2,3,4-tetrahydro-5-hydroxy-4,4-dimethyl-2-oxo-6-quinolinyl)amino]sulfonyl]-4-[4-(1,1-dioxido-4-thiomorpholinyl)phenoxy]phenyl]-5-(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)



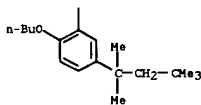
PAGE 1-A

10/810,325

L13 ANSWER 20 OF 362 CA COPYRIGHT 2005 ACS on STN

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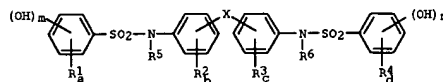
PAGE 2-A



L13 ANSWER 21 OF 362 CA COPYRIGHT 2005 ACS on STN

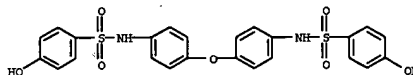
ACCESSION NUMBER: 130:345086 CA
 TITLE: Thermal recording material
 INVENTOR(S): Ohashi, Reiji; Nakano, Tomoyuki; Yanai, Koichi;
 Yonehige, Seiki; Yoshioka, Hidetoshi
 PATENT ASSIGNEE(S): Nihon Seishi K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
 CODEN: JXKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11123876	A2	19990511	JP 1998-221200	19980805 <--
PRIORITY APPLN. INFO.: MARPAT 130:345086			JP 1997-221811	A 19970818
OTHER SOURCE(S): GI				



AB A thermal recording material comprises a color former and a color developer represented by the formula 1 (X = a direct bond or a divalent group; R1, R2 = alkyl, alkoxy, halogen, carboxy, alkoxycarbonyl, or carbamoyl; R3, R4 = alkyl, alkoxy, halogen, hydroxy, carboxyl, or alkoxycarbonyl; R5, R6 = H or alkyl; a, b, c, d = an integer of 0-4; m, n = an integer of 1-5).

IT 52692-07-69
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (preparation and use as color developer for thermal recording material)
 RN 52692-07-6 CA
 CN Benzenesulfonamida, N,N'-(oxydi-4,1-phenylene)bis[4-hydroxy- (9CI) (CA INDEX NAME)



L13 ANSWER 22 OF 362 CA COPYRIGHT 2005 ACS on STN

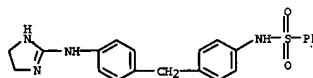
ACCESSION NUMBER: 130:252356 CA
 TITLE: Preparation of 2-[(arylmethyl)phenylamino]-2-imidazolines as prostaglandin IP receptor antagonists
 INVENTOR(S): Bley, Keith Roger; Clark, Robin Douglas; Jahangir, Alam; Kowalczyk, Bruce Andrew; Lopez-Tapala, Francisco Javier; Muehlendorf, Alexander Victor; O'Yang, Counder; Sun, Thomas Weitao
 PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.
 SOURCE: Eur. Pat. Appl., 61 pp.
 CODEN: EPXKDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 902018	A2	19990317	EP 1998-116091	19980826 <--
EP 902018	A3	20010502		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
NZ 331480	A	20000228	NZ 1998-331480	19980820
US 6184242	B1	20010206	US 1998-137507	19980820
CA 2245755	AA	19990304	CA 1998-2245755	19980827 <--
IL 125982	A1	20020912	IL 1998-125982	19980828
ZA 9807925	A	19990304	ZA 1998-7925	19980831 <--
JP 11140057	A2	19990525	JP 1998-248047	19980902 <--
JP 3040752	B2	20000515		
NO 9804044	A	19990305	NO 1998-4044	19980903 <--
NO 312294	B1	20020422		
AU 9883094	A1	19990318	AU 1998-83094	19980903 <--
AU 746480	B2	20020502		
BR 9803373	A	20010424	BR 1998-3373	19980903
RU 2211834	C2	20030910	RU 1998-117245	19980903
CN 1216762	A	19990519	CN 1998-118587	19980904 <--
CN 1110484	B	20030604		
TW 432046	B	20010501	TW 1998-87114724	19980908
HK 1019334	A1	20040213	HK 1999-104374	19991007
US 6472536	B1	20021029	US 2000-666065	20000919
US 2003036655	A1	20030220	US 2002-159589	20020531
US 6596876	B2	20030722		
US 2003229123	A1	20031211	US 2003-425778	20030429
US 6693200	B2	20040217		
US 2004122053	A1	20040624	US 2003-731607	20031209
PRIORITY APPLN. INFO.: MARPAT 130:252356				
OTHER SOURCE(S):				

AB RICH2ZNR (R = 2-imidazolyl) (I) (R1 = R3Z1, R5Z2, (un)substituted 4-piperidinyl, etc.; R3 = halo, (cyclo)alkyl, heterocyclyl, (di)alkylamino, carbamoyl(alkyl), etc.; R5 = hydroxy(alkyl), alkoxy(alkyl), acylalkoxy, etc.; Z1 = (un)substituted 1,4-phenylene; Z2 = pyrrole-, furan-, or thiophene-3-, -4-, or -5,2-diyl) were prepared as prostaglandin IP receptor antagonists (no data). Thus, PhOMe was acylated by 4-(O2N)C6H4COCl and the product treated with HBr to give 4-(HO)C6H4COCl (NO2)-4 which was etherified by Me2CBr and the reduced

L13 ANSWER 22 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)
 product condensed with 2-chloro-2-imidazoline to give I (R1 = 4-(Me2CO)C6H4, Z = 1,4-phenylene).

IT 221531-11-9P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of 2-[(arylmethyl)phenylamino]-2-imidazolines as prostaglandin IP receptor antagonists)
 RN 221531-11-9 CA
 CN Benzenesulfonamide, N-[4-[[4-[(4,5-dihydro-1H-imidazol-2-yl)amino]phenyl]methyl]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L13 ANSWER 23 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
130:217595 CA

TITLE:

Synthesis and Biological Properties of Novel
Pyridinoloalkanoyl Thioesters (PATE) as Anti-HIV-1
Agents That Target the Viral Nucleocapsid Protein Zinc
Fingers

AUTHOR(S):

Turpin, Jim A.; Song, Yongsheng; Inman, John K.;
Huang, Mingjun; Wallqvist, Anders; Maynard, Andrew;
Covell, David G.; Rice, William G.; Appella, Ettore
Laboratory of Antiviral Drug Mechanisms and Laboratory
of Experimental and Computational Biology National
Cancer Institute-Frederick Cancer Research and
Development Center, SAIC Frederick, Frederick, MD,
21702-1201, USA

SOURCE:

Journal of Medicinal Chemistry (1999),
42(1), 67-86

PUBLISHER:

CODEN: JMCHAR; ISSN: 0022-2623
American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Nucleocapsid p7 protein (NCP7) zinc finger domains of the human immunodeficiency virus type 1 (HIV-1) are being developed as antiviral targets due to their key roles in viral replication and their mutationally nonpermissive nature. On the basis of our experience with sym. disulfide benzamides (DIBAs; Rice et al. science 1995, 270, 1194-1197), we synthesized and evaluated variants of these dimers, including sets of 4,4'- and 3,3'-disubstituted di-Ph sulfones and their monomeric benisothiazolone derivs. (BITAs). BITAs generally exhibited diminished antiviral potency when compared to their disulfide precursors. Novel, monomeric structures were created by linking haloalkanoyl groups to the benzamide ring through -NH-C(=O)- (amide) or -S-C(=O)- (thioester) bridges. Amide-linked compds. generally lacked antiviral activity, while haloalkanoyl thioesters and non-halogen-bearing analogs frequently exhibited acceptable antiviral potency, thus establishing thioester benzamides per se as a new anti-HIV chemotype. Pyridinoloalkanoyl thioesters (PATEs) exhibited superior anti-HIV-1 activity with minimal cellular toxicity and appreciable water solubility. PATEs were shown to preferentially target the NCP7 Zn finger when tested against other mol. targets, thus identifying thioester benzamides, and PATEs in particular, as novel NCP7 Zn finger inhibitors for in vivo studies.

IT 221119-80-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and structure activity relations of novel pyridinoloalkanoyl thioesters as anti-HIV-1 agents targeting viral nucleocapsid protein zinc fingers)

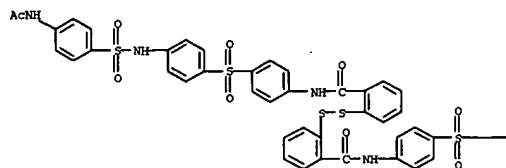
RN 221119-80-8 CA

CN Benzamide, 2,2'-dithiobis[N-[4-[[[4-(acetylamino)phenyl]sulfonyl]amino]phenyl]sulfonyl]phenyl]- (9CI) (CA INDEX NAME)

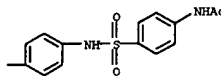
L13 ANSWER 23 OF 362 CA COPYRIGHT 2005 ACS on STN

(Continued)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT:

51

THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 24 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

130:209497 CA

TITLE:

Substituted benzene compounds as antiproliferative and
cholesterol lowering agents
Medina, Julio Cesar; Clark, David Louis; Flygare, John
A.; Rosen, Terry J.; Shan, Bei

PATENT ASSIGNEE(S):

Tularik Inc., USA

SOURCE:

PCT Int. Appl., 113 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

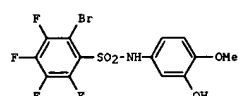
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9910320	A1	19990304	WO 1998-US16781	19980813 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, BG, BR, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6284923	B1	20010904	US 1997-917025	19970822
CA 2301842	AA	19990304	CA 1998-2301842	19980813 <--
AU 9887824	A1	19990316	AU 1998-87824	19980813 <--
AU 748826	B2	20020613		
EP 1005453	A1	20000607	EP 1998-939384	19980813
EP 1005453	B1	20041027		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001514167	T2	20010911	JP 2000-507650	19980813
AT 280756	E	20041115	AT 1998-939384	19980813
US 2002013496	A1	20020131	US 2001-872463	20010531
US 6388131	B2	20020514		
PRIORITY APPLN. INFO.:			US 1997-917025	A 19970822
			WO 1998-US16781	W 19980813

OTHER SOURCE(S):

MARPAT 130:209497

GI



I

AB RS(O)nYR1 [R = (un)substituted Ph; R1 = (un)substituted aryl, heteroaryl; Y = bond, o, (un)substituted NH, NHCH2, CH2; n = 1, 2] were prepared for use as antiproliferative and anticholesteremic agents. Thus, 1-bromo-2,3,4,5-tetrafluorobenzene was chlorosulfonylated and treated with 3,4-HO(MeO)C6H3NH2 to give the sulfonamide I. I had an antiproliferative IC50 against HeLa cells of 0.15 µM and a min. dose for maximum induction of LDL receptors of 0.15 µM.

IT 220990-65-8P

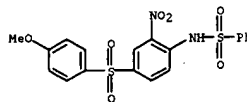
L13 ANSWER 24 OF 362 CA COPYRIGHT 2005 ACS on STN

(Continued)

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(benzenesulfonamides and diaryl sulfones as antiproliferative and anticholesteremic agents)

RN 220990-65-8 CA

CN Benzenesulfonamide, N-[4-[[4-methoxyphenyl]sulfonyl]-2-nitrophenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

13

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/810,325

L13 ANSWER 25 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:
TITLE:

130:125095 CA

Preparation of (hetero)aryl substituted
benzenesulfonamides for the treatment of anxiety
and/or depression

INVENTOR(S):

Bromidge, Steven Mark; Moss, Stephen Frederik

PATENT ASSIGNEE(S):

Smithkline Beecham Plc, UK

SOURCE:

PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9902502	A2	19990121	WO 1998-EP4973	19980709 <--
WO 9902502	A3	19990603		
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GU, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, EF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2296033	AA	19990121	CA 1998-2296033	19980709 <--
AU 9892578	A1	19990208	AU 1998-92578	19980709 <--
AU 736256	B2	20010726		
EP 994862	A2	20000426	EP 1998-945162	19980709
EP 994862	B1	20050601		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO			
TR 200000073	T2	20000621	TR 2000-200000073	19980709
BR 9810991	A	20000808	BR 1998-10991	19980709
JP 2002511097	T2	20020409	JP 1999-508186	19980709
CN 1087294	B	20020710	CN 1998-806921	19980709
AT 256811	E	20050615	AT 1998-945162	19980709
ZA 9806139	A	20000110	ZA 1998-6139	19980710
TW 470743	B	20020101	TW 1998-87111166	19980710
NO 2000000108	A	20000110	NO 2000-108	20000110
US 6316450	B1	20011113	US 2000-462652	20000110
PRIORITY APPLN. INFO.:			GB 1997-14530	A 19970711
			GB 1997-24530	A 19971119
			WO 1998-EP4973	W 19980709

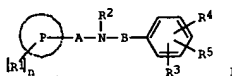
OTHER SOURCE(S):

MARPAT 130:125095

GI

L13 ANSWER 25 OF 362 CA COPYRIGHT 2005 ACS on STN

(Continued)



AB The title compds. [I; P = Ph, naphthyl, 5-7 membered heterocyclyl containing 1-4 heteroatoms selected from O, N or S, etc.; A = a single bond, Cl-6 alkenylene, Cl-6 alkenylene; B = SO2; R1 = halo, Cl-6 alkyl optionally substituted by one or more fluorine atoms, C3-6 cycloalkyl, etc.; R2 = H, Cl-6 alkyl, aryl Cl-6 alkyl, etc.; R3 = H, halo, Cl-6 alkyl, etc.; R4 = X(CH2)pR6 (wherein X = a single bond, CH2, O, etc.; p = 0-6; R6 = (un)substituted 4-7 membered heterocyclyl containing 1-3 heteroatoms selected from N, S or O, NR7R8; R7, R8 = H, Cl-6 alkyl, aryl Cl-6 alkyl); R5 = R3; R3R5 = (CH2)2O, (CH2)3O optionally substituted with 1 or more Cl-6 alkyl groups], useful in the treatment of CNS disorders such as anxiety and depression, were prepared. Thus, refluxing 1-[4-methoxy-3-(4-methylpiperazin-1-yl)benzenesulfonyl]-7-trifluoromethyl-1,2,3,4-tetrahydroquinoline with 1-chloroethyl chloroformate in 1,2-dichloroethane for 18 h followed by addition of diisopropylethylamine afforded 52% II.HCl which showed pKi > 8.5 and selectivity > 100 against human cloned 5-HT6 receptors.

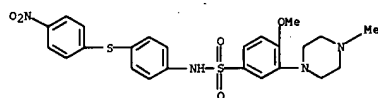
1-[4-methoxy-3-(4-methylpiperazin-1-yl)benzenesulfonyl]-7-trifluoromethyl-1,2,3,4-tetrahydroquinoline with 1-chloroethyl chloroformate in 1,2-dichloroethane for 18 h followed by addition of diisopropylethylamine afforded 52% II.HCl which showed pKi > 8.5 and selectivity > 100 against human cloned 5-HT6 receptors.

IT 219961-54-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (hetero)aryl substituted benzenesulfonamides for the treatment of anxiety and/or depression)

RN 219961-54-3 CA
CN Benzenesulfonamide, 4-methoxy-3-(4-methyl-1-piperazinyl)-N-[4-[(4-nitrophenyl)thio]phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

L13 ANSWER 25 OF 362 CA COPYRIGHT 2005 ACS on STN

(Continued)



● HCl

L13 ANSWER 26 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

130:110258 CA

TITLE:

Preparation of [(aminophenoxyphenyl)acetylaminol]isothiazoles and -pyridines as insecticides and fungicides
Heil, Markus; Bretschneider, Thomas; Kleefeld, Gerd; Erdelen, Christoph; Kuck, Karl-Heinz; Stenzel, Klaus; Turberg, Andreas; Mencke, Norbert

PATENT ASSIGNEE(S):

Bayer A.-G., Germany

SOURCE:

Ger. Offen., 28 pp.

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

1

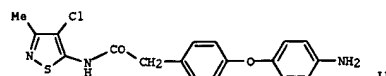
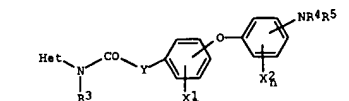
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19727162	A1	19990107	DE 197-19727162	19970626 <--
WO 9900375	A1	19990107	WO 1998-EP3592	19980615 <--
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GU, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, EF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
AU 9881111	A1	19990111	AU 1998-81111	19980615 <--
EP 991631	A1	20000412	EP 1998-930804	19980615
R:	AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, PT			
TR 9903230	T2	20000421	TR 1999-9903230	19980615
BR 9810941	A	20000926	BR 1998-10941	19980615
JP 2002512632	T2	20020423	JP 1999-505249	19980615
MX 9911749	A	20000630	MX 1999-11749	19991215
PRIORITY APPLN. INFO.:			DE 197-19727162	A 19970626
			WO 1998-EP3592	W 19980615

OTHER SOURCE(S):

MARPAT 130:110258

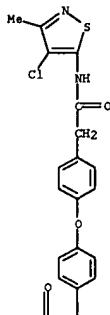
GI



AB The title compds. [I; Het = substituted thiazolyl, pyridyl, pyrimidinyl,

L13 ANSWER 26 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)
 thiadiazolyl; R3 = H, (halo)alkyl, alkoxyalkyl, alkylcarbonyl,
 (un)substituted arylcarbonyl, arylsulfonyl, etc.; R4, R5 = H, COR6, CO2R7,
 SO2R8; R6-R8 = (halo)alkyl, (halo)alkenyl, (halo)alkynyl, alkylthioalkyl,
 (un)substituted cycloalkyl, etc.; X1, X2 = halo, NO2, cyano, (halo)alkyl,
 alkoxy; Y = alk(en)ylene, alkyleneoxy; m, n = 0-3) were prepd., e.g., by
 redn. of the parent nitro compds. and conversion of the resulting primary
 amines. For example, treating a refluxing mixt. of 2.5 g
 4-chloro-3-methyl-5-[4-(4-nitrophenoxy)phenylacetamino]isothiazole and
 2.0 g Fe powder in 50 mL 50% aq. EtOH dropwise with 0.16 mL HCl in 5 mL
 50% EtOH and refluxing the whole for 3 h gave 1.2 g II (m. 226°)
 which at 0.1% on rice seedlings gave 100% kill on Nephrotettix cincticeps.
 219658-56-7p
 IT RL: AGR (Agricultural use); BAC (Biological activity or effector, except
 adverse); BSU (Biological study, unclassified); SPN (Synthetic
 preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of [(aminophenoxyphenyl)acetylamin]isothiazoles and
 -pyridines
 as insecticides and fungicides)
 RN 219658-56-7 CA
 CN Benzenesulfonamide, N-(4-chloro-3-methyl-5-isothiazolyl)-4-[4-
 [(phenylsulfonyl)amino]phenoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A



L13 ANSWER 26 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 2-A



L13 ANSWER 27 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 130:73850 CA
 TITLE: Positive-working photosensitive resin composition,
 pattern formation using same, and manufacture of
 electronic device
 INVENTOR(S): Maegawa, Yasunari; Mitsuwa, Takao; Ueno, Takumi;
 Okabe, Yoshiaki
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
 CODEN: JKXGAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10307394	A2	19981117	JP 1997-118980	19970509 <--
			JP 1997-118980	19970509

PRIORITY APPL. INFO.:
 AB The title composition contains a compound that generates acid upon light
 irradiation

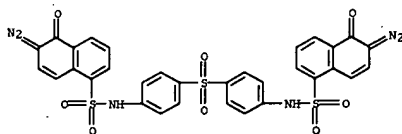
and a sulfone-containing polymer of the formula
 [NHCO₂R1(CO2H)2CONHR2]x[NHCO₂R3
 CONHR2]100-x (R1-3 = imido, C6-50 alkyl containing no side chain
 alkoxyalkyl)
 group which may have a polyvalent linking group of O, S, methylene, amine,
 carbonyl, sulfone, ester, sulfonester, amido, urea, carbonate or
 carbamate, aryl, aralkyl, heterocyclic group, x1 of R1-3 has
 x1 sulfone group; x = 5-100 mol %) in which the carboxyl group
 concentration is ≤2.6 mmol/g. The composition is coated on a substrate,
 irradiated with an electromagnetic wave through a photomask, and developed
 with an alkaline developing solution to form a pattern. A method of
 manufacturing an
 electronic device using the composition and the above process is also
 claimed.

The composition is developable with alkaline developing solns. and provides
 high-thick relief patterns with high sensitivity and resolution. The
 composition
 is useful for manufacture of elec. circuits.

IT 125677-73-8P
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material
 use); PREP (Preparation); USES (Uses)

(acid generator; photoresist composition containing acid generator and
 polyamic acid having sulfone group)

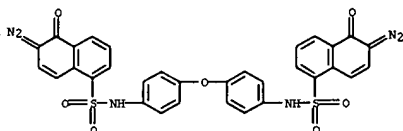
RN 125677-73-8 CA
 CN 1-Naphthalenesulfonamide, N,N'-(sulfonyldi-4,1-phenylene)bis[6-diazo-5,6-
 dihydro-5-oxo- (9CI) (CA INDEX NAME)



L13 ANSWER 27 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

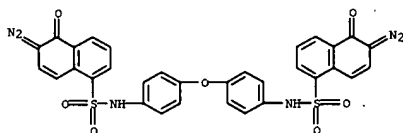
10/810,325

L13 ANSWER 28 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 129:296069 CA
 TITLE: Alkali-developable positive-photosensitive polyimide based on diazonaphthoquinone sensitizer
 AUTHOR(S): Ueno, T.; Okabe, Y.; Miwa, T.; Maekawa, Y.; Rames-Langlade, G.
 CORPORATE SOURCE: Hitachi Research Laboratory, Hitachi Ltd., Hitachi, 319-12, Japan
 SOURCE: ACS Symposium Series (1998), 706(Micro- and Nanopatterning Polymers), 358-367
 CODEN: ACSMCH; ISSN: 0097-6156
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB We report on the pos. alkali-developable photosensitive polyimides based on an alkali-soluble polyimide precursor as a base polymer and diazonaphthoquinone (DNQ) sensitizer to improve process stability and sensitivity. Polyamic acid ester with pendant carboxylic acid (PAE-COOH) showed good dissoln. behavior in aqueous alkali developer. The dissoln. rate of PAE-COOH was controlled by the content of pendant carboxylic acid. It was found that a photosensitive system composed of Bu ester of PAE-COOH and a DNQ compound can avoid the residue at the edge of hole patterns (footing) after development, while that of Me ester of PAE-COOH showed the residue. A DNQ compound containing sulfonamide derived from diaminodiphenylether renders improved sensitivity compared with DNQ comds. derived from phenol derivs.
 IT 125677-72-7P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (sensitizer; alkali-developable pos.-photosensitive polyimide based on alkali-soluble polyimide precursor and diazonaphthoquinone sensitizer for lithog. photoresist applications)
 RN 125677-72-7 CA
 CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



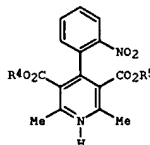
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



L13 ANSWER 29 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 129:283432 CA
 TITLE: Heat-resistant photosensitive polymer composition and formation of relief pattern
 INVENTOR(S): Nunomura, Masataka; Uchimura, Shunichiro; Sasaki, Mamoru; Nishio, Shigeru
 PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JXKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10239844	A2	19980911	JP 1997-47455	19970303 <--
PRIORITY APPLN. INFO.:			JP 1997-47455	19970303
OTHER SOURCE(S):		MARPAT 129:283432		

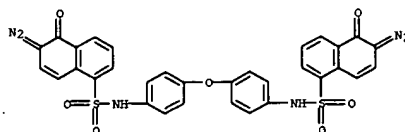


AB The title composition contains (a) a polyamic acid ester having a repeating unit COR1(CO2R3)2CONHR2NH (R1 = tetravalent organic group; R2 = CO2H- or phenolic OH-containing divalent organic group; R3 = monovalent organic group), (b) an o-quinonediazide compound, and (c) a pyridine derivative I (R4, R5 = alkyl).
 A method of forming a relief pattern is also claimed, involving the steps of coating and drying the composition on a substrate, patternwise exposing, developing, and heat-treating the coating. The pos.-working composition shows high photosensitivity and provides high quality relief patterns with high residual rate at the unexposed area.
 IT 125677-72-7
 RL: TEM (Technical or engineered material use); USES (Uses)
 (heat-resistant photoresist composition containing polyamic acid ester, quinonediazide compound, and pyridine derivative)
 RN 125677-72-7 CA
 CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)

L13 ANSWER 30 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 129:283431 CA
 TITLE: Heat-resistant photosensitive polymer composition and formation of relief pattern
 INVENTOR(S): Nunomura, Masataka; Nishio, Shigeru; Sasaki, Mamoru; Uchimura, Shunichiro
 PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JXKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10239842	A2	19980911	JP 1997-47457	19970303 <--
EP 863436	A1	19980909	EP 1998-103712	19980303 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: JP 1997-47457 A 19970303
 JP 1997-138347 A 19970528
 JP 1997-246813 A 19970911
 AB The title composition contains (a) a polyamic acid ester having a repeating unit COR1(CO2R3)2CONHR2NH (R1 = tetravalent organic group; R2 = CO2H- or phenolic OH-containing divalent organic group; R3 = monovalent organic group), (b) a polyamic acid having a repeating unit COR4(CO2H)2CONHR5SR62(OSiR62)qR5NH (R4 = tetravalent organic group; R5 = divalent organic group; R6 = monovalent organic group; q ≥ 1), and (c) an o-quinonediazide compound A method of forming a relief pattern is also claimed, involving the steps of coating and drying the composition on a substrate, patternwise exposing, developing, and heat-treating the coating. The pos.-working composition shows high photosensitivity and developability and provides a relief pattern showing good adhesion to substrate.
 IT 125677-72-7P
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (heat-resistant photosensitive composition containing polyamic acid, polyamic acid ester, and quinonediazide compound)
 RN 125677-72-7 CA
 CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



10/810,325

L13 ANSWER 31 OF 362 CA COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 129:237670 CA
 TITLE: Heat-resistant photosensitive polymer composition for forming patterns for semiconductor device fabrication
 INVENTOR(S): Nunomura, Masataka; Sasaki, Mamoru; Uchimura, Shunichiro; Ohe, Masayuki; Nishio, Shigeru
 PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 22 pp.
 CODEN: EPXKDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

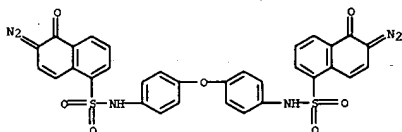
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 863436	A1	19980909	EP 1998-103712	19980303 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 10239842	A2	19980911	JP 1997-47457	19970303 <--
JP 10333332	A2	19981218	JP 1997-138347	19970528 <--
JP 11084653	A2	19990326	JP 1997-246813	19970911 <--
PRIORITY APPL. INFO.:				
			JP 1997-47457	A 19970303
			JP 1997-138347	A 19970528
			JP 1997-246813	A 19970911

AB The present invention provides a heat-resistant pos.-tone photosensitive polymer composition capable of forming a heat-resistant polyimide usable as

a buffer coating for an electronic component or as an interlayer dielec. film by heat treatment for semiconductor device fabrication. This composition comprises (a) a polyimide precursor or a polyimide having a carboxyl group or a phenolic hydroxyl group, (b) a polyamic acid having a siloxane bond, and (c) a photoacid generator.

IT 125677-72-7
 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) (photoimaging compas. for heat-resistant pattern formation containing polyamic acids and)

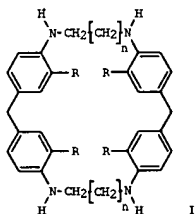
RN 125677-72-7 CA
 CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 32 OF 362 CA COPYRIGHT 2005 ACS ON STN

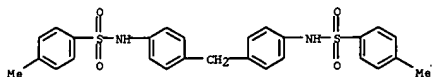
ACCESSION NUMBER: 129:161550 CA
 TITLE: Synthesis of new water-soluble azaparcyclophanes as host compounds
 AUTHOR(S): Zhang, Xiulian; Yin, Wei; Mei, Shengkai; Zhou, Maoqing
 CORPORATE SOURCE: Dept. Chem., Guangdong Education Coll., Canton, 510303, Peop. Rep. China
 SOURCE: Huaxue Tongbao (1998), (6), 42-45
 CODEN: HHTPAU; ISSN: 0441-3776
 PUBLISHER: Kexue Chubanshe
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 GI



AB Title compds. I (R = CH3, Cl, H; n = 0, 2, 4) were prepared by cyclization of bis(4-(2-nitro-3-R-benzene)methane and Br(CH2)nBr in DMF and deprotection by reflux with HBr in phenol.

IT 74043-79-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (synthesis of azaparcyclophanes)

RN 74043-79-1 CA
 CN Benzenesulfonamide, N,N'-(methylenedi-4,1-phenylene)bis[4-methyl- (9CI) (CA INDEX NAME)



L13 ANSWER 31 OF 362 CA COPYRIGHT 2005 ACS ON STN (Continued)

L13 ANSWER 33 OF 362 CA COPYRIGHT 2005 ACS ON STN

ACCESSION NUMBER: 129:142609 CA
 TITLE: Positive-working photosensitive resin composition, pattern formation, and manufacture of large-scale integrated circuit using same
 INVENTOR(S): Mitsuwa, Takao; Okabe, Yoshiaki; Maegawa, Yasunari; Langlade, Geradine Rames; Ueno, Isao
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

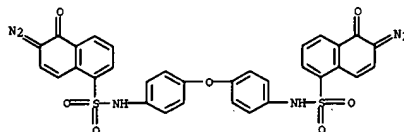
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10186658	A2	19980714	JP 1996-343595	19961224 <--
PRIORITY APPL. INFO.:				
			JP 1996-343595	19961224

AB The title composition comprises a resin having a repeating unit R3NHCOA(CO2R1)(CO2R2)CONH (A = tetravalent organic group constituting C24 tetracarboxylic acids or their derivs.; R1, R2 = H or C5-20 aliphatic carboxylic acid, 21 of R1 and R2 is not H; R3 = divalent organic group constituting diamine), a diazoquinone compound 1-100, and a cresol novolak resin 1-30 parts per 100 parts of the resin component. The composition is coated on a substrate, irradiated the coating with an electromagnetic wave through a light-shielding mask, and developed to form a pattern. A method of manufacturing a large-scale integrated circuit

involving the above procedure is also claimed. The composition shows high developability and thermal resistance and provides high resolution relief patterns with high mech. strength.

IT 125677-72-7, 4,4'-Bis(1,2-naphthoquinone-2-diazo-5-sulfonylamino)diphenyl ether
 RL: TEM (Technical or engineered material use); USES (Uses) (photoresist composition containing polyamic acid ester, diazoquinone compound, and cresol novolak resin)

RN 125677-72-7 CA
 CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)



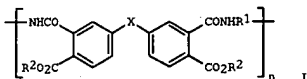
10/810,325

L13 ANSWER 34 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 129:129013 CA
 TITLE: Positive-working photosensitive resin composition and polyimide film formation using it
 INVENTOR(S): Okabe, Yoshiaki; Maegawa, Yasushige; Mitsuwa, Takao; Ueno, Isao; Langlade, Geradine Rames
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10171116	A2	19980626	JP 1996-331870	19961212 <--
PRIORITY APPLN. INFO.:			JP 1996-331870	19961212

GI



AB The title composition, developable with aqueous alkaline solns., contains a polyamic acid ester I (R1 = divalent organic group (55-85 mol% of R1 are CO2H); R2 = hydrophobic group; X = SO2; n = 6-570) and an o-quinonediazidosulfonamide R4 (NR3RS) m and/or an o-quinonediazidosulfonamide sulfone ester (R3O)pR4 (NR3RS) q (R3 = o-quinonediazidosulfonyl; R4 = C2-30 organic group; R5 = alkyl, H; m, q = 1-6; p = 1-5). The composition may also contain an organic solvent and the total concentration of the polymer and the o-quinonediazidosulfonamide compd(s) may be 4-45 weight%. A solid substrate is coated with the composition, pre-baked, exposed through a photomask, etched with an aqueous alkaline solution, and heat-treated to form a polyimide film. The composition provides pos. polyimide relief patterns with good profile and is useful for semiconductor devices, etc.

IT 125677-72-7P
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (quinonediazidosulfonamide-containing pos.-working photosensitive polymer composition for polyimide relief pattern formation)

RN 125677-72-7 CA
 CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)

L13 ANSWER 35 OF 362 CA COPYRIGHT 2005 ACS on STN

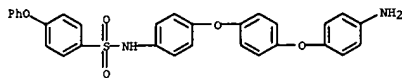
ACCESSION NUMBER: 129:47418 CA
 TITLE: Material having super water repulsiveness controlled by light for lithographic master printing plate and electrophotographic photoreceptor
 INVENTOR(S): Sasaki, Hiroshi; Shoji, Mitsuyoshi; Kawashima, Kenichi; Ito, Yutaka
 PATENT ASSIGNEE(S): Hitachi, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10114888	A2	19980506	JP 1996-269636	19961011 <--
US 6027852	A	20000222	US 1997-940951	19971008
US 6087072	A	20000711	US 1999-365869	19990803
PRIORITY APPLN. INFO.:			JP 1996-269636	A 19961011
			US 1997-940951	A1 19971008

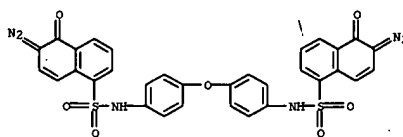
AB The material comprises surface which has $\geq 150^\circ$ contact angle towards water, wherein the material surface has $< 150^\circ$ contact angle upon light irradiation. The material has the light-controllable super repulsive surface.

IT 208183-16-8DP, reaction products with carboxy-terminated perfluoroalkyl polyethers
 RL: PNU (Preparation, unclassified); PREP (Preparation)
 (material having super water repulsiveness controlled by light)

RN 208183-16-8 CA
 CN Benzenesulfonamide, N-[4-(4-aminophenoxy)phenoxy]phenyl-4-phenoxy- (9CI) (CA INDEX NAME)



L13 ANSWER 34 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)



L13 ANSWER 36 OF 362 CA COPYRIGHT 2005 ACS on STN

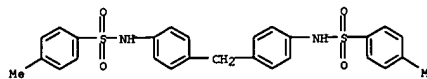
ACCESSION NUMBER: 128:270599 CA
 TITLE: Studies on water-soluble artificial receptors containing chiral side chains derived from carbohydrates. 1. Synthesis of optically active cyclophane TCP44 and its complexation selectivity for aromatic guests in acidic aqueous solutions
 AUTHOR(S): Takahashi, Ichiro; Hirano, Yuuki; Arakawa, Hiroshi; Kitajima, Hidshiko; Hatanaka, Minoru; Ise, Kimio; Odashima, Kazunori; Koga, Kenji
 CORPORATE SOURCE: Dep. Applied Chem. and Biotechnol., Fac. Eng., Fukui Univ., Fukui, 910, Japan
 SOURCE: Heterocycles (1997), 46, 589-604
 CODEN: HETCYM; ISSN: 0385-5414
 PUBLISHER: Japan Institute of Heterocyclic Chemistry
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB L-Tartrate-derived cyclophane TCP44, the first totally synthetic host with a chiral hydrophobic cavity, and its complexation properties are described. The synthesis employs 1:1 cyclization via a U-shaped precursor containing chiral C4 units derived from L-tartaric acid. TCP44, soluble in acidic water as an amine salt, displayed a complexation selectivity for hydrophobic aromatic guests. Inclusion of aromatic guests into the cavity

was verified by fluorescence and ¹H NMR spectra. A possible structure of inclusion cavity is discussed.

IT 74043-79-1
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of optically active cyclophane TCP44 and its complexation selectivity for aromatic guests)

RN 74043-79-1 CA
 CN Benzenesulfonamide, N,N'-(methylenedi-4,1-phenylene)bis[4-methyl- (9CI) (CA INDEX NAME)



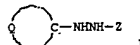
REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/810,325

L13 ANSWER 37 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 128:263878 CA
 TITLE: Silver halide photographic material and image formation using it
 INVENTOR(S): Nakamura, Takemare
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 57 pp.
 CODEN: JKOKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10062895	A2	19980306	JP 1996-216206	19960816 <--
US 6013421	A	20000111	US 1997-897159	19970718
PRIORITY APPLN. INFO.:			JP 1996-207708	A 19960719
			JP 1996-216206	A 19960816

OTHER SOURCE(S): MARPAT 128:263878
 GI



AB The title material contains, in 21 of the hydrophilic colloid layers formed on a support, a color developing agent I (Z = carbamoyl, acyl, alkoxy-carbonyl, aryloxy-carbonyl; Q = atoms required to form an unsatd. ring along with the C atom), a coloring coupler that forms a dye image upon coupling with the oxidized product of the developing agent, and a coupler that coupling-reacts with the oxidized product, but is not color-developed to an extent contributing to the image d. The material is heat-developed or developed in a solution to form an image. The material provides high Dmax and low Dmin images.

IT 205120-17-8
 RL: TEM (Technical or engineered material use); USES (Uses)
 (photog film containing hydrazine derivative developer and coloring and noncoloring couplers)

RN 205120-17-8 CA
 CN Benzenesulfonamide, N-[3-[[[3-(7-chloro-6-(2-phenoxyethoxy)-1H-pyrazolo[1,5-b][1,2,4]triazol-2-yl]phenyl]amino]sulfonyl]-4-(4-methoxyphenoxy)phenyl]-2-(octyloxy)-5-(1,1,3,3-tetramethylbutyl)- (9CI)
 (CA INDEX NAME)

L13 ANSWER 38 OF 362 CA COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 128:223793 CA
 TITLE: Silver halide photographic material containing color developing agent and coupler and imaging method for it
 INVENTOR(S): Nakamura, Takemare; Matsumoto, Kazuhiko
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 63 pp.
 CODEN: JKOKAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10039467	A2	19980213	JP 1996-207708	19960719 <--
US 6013421	A	20000111	US 1997-897159	19970718
PRIORITY APPLN. INFO.:			JP 1996-207708	A 19960719
			JP 1996-216206	A 19960816

GI For diagram(s), see printed CA issue.
 AB The material contains a color developing agent I (Z = CONH2, acyl, alkoxy-carbonyl, aryloxy-carbonyl; Q = atomic group forming unsatd. ring) and

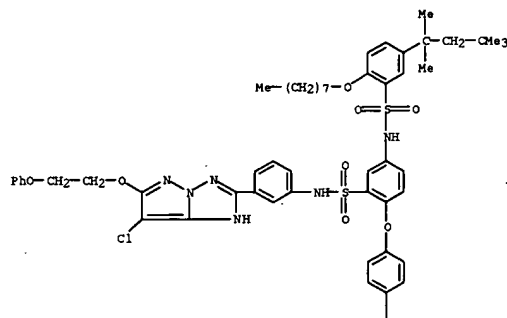
a coupler Cp-(Time)t-PUG [Cp = coupling group reactive with oxidized I; (Time)t-PUG = leaving group from Cp upon coupling reaction coupling; Time = PUG-generating group after released from Cp; PUG = useful group for photog.; t = 0-3] in 21 hydrophilic colloid layer. In the imaging method, the above material is developed by applying heat, using a liquid developer, or developing in the presence of an alkali generated from a hardly-soluble metal salt and a complexing agent therefor. The material shows high graininess and sharpness and the method can develop the material rapidly and reduce processes of wastewater treatment.

IT 204077-07-6
 RL: DEV (Device component use); USES (Uses)
 (coupler; silver halide photog. material containing color developing agent and coupler in hydrophilic colloid layer)

RN 204077-07-6 CA
 CN Octanamide, 2-[2,4-bis(1,1-dimethylpropyl)phenoxy]-N-[3-chloro-5-[4-[[[3-chloro-5-[[6-(1,1-dimethylethyl)-2-[4-[(methylsulfonyl)amino]phenyl]-7H-pyrazolo[1,5-b][1,2,4]triazol-7-ylidene]amino]-2-hydroxyphenyl]sulfonyl]amino]phenoxy]-2-hydroxyphenyl]- (9CI) (CA INDEX NAME)

L13 ANSWER 37 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A

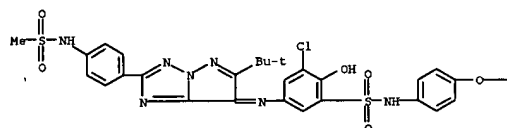


PAGE 2-A

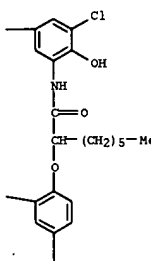


L13 ANSWER 38 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



PAGE 2-B



10/810,325

L13 ANSWER 38 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

L13 ANSWER 39 OF 362 CA COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 128:186505 CA
 TITLE: Photosensitive polyamic acid composition with high sensitivity providing images with high thermal resistance and relief pattern made of polyimide
 INVENTOR(S): Nunomura, Masataka; Uchimura, Shunichiro; Mitsuwa, Takao
 PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JXKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10010717	A2	19980116	JP 1996-167464	19960627 <--
			JP 1996-167464	19960627

PRIORITY APPLN. INFO.:

AB The composition comprises
 $[C(O)R1(CO2R5)2CONHR2NH]_n$ [C(O)R1(CO2R5)2CONHR3(R6NH2)
 $NH]_m$ [C(O)R2(CO2R5)2CONHR4NH]_n (R1 = C22 tetravalent organic group; R2 = C22 divalent organic group with 21 CO2H (number of CO2H is not included in the C number); R3 = trivalent organic group containing aromatic ring; R4 =

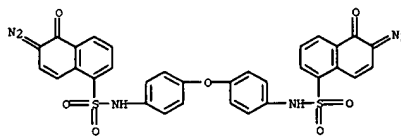
C22 divalent group; R5 = C21 organic group; R6 = SO2, CO; one of two imino groups bonded to R3 and -R6NH2 are at ortho; l = 20-90%, m = 5-15%, n = 0-79.5%) and o-quinonediazide. The relief pattern is formed by coating the above photosensitive composition, drying, exposing, developing,

and heat-processing. The polymer shows high sensitivity, providing images with high thermal resistance for a short development time.

IT 125677-72-7

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (photoresist containing polyamic acid and o-quinonediazide for heat-resistant polyimide relief pattern)

RN 125677-72-7 CA
 CN 1-Naphthalenesulfonamide, N,N'-(oxydi-4,1-phenylene)bis[6-diazo-5,6-dihydro-5-oxo- (9CI) (CA INDEX NAME)

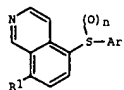


L13 ANSWER 40 OF 362 CA COPYRIGHT 2005 ACS on STN

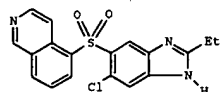
ACCESSION NUMBER: 128:180412 CA
 TITLE: Preparation of isoquinoline derivatives for the treatment of neurodegenerative diseases
 INVENTOR(S): Ishiguro, Susumu; Shimada, Shinichi; Seya, Motohide; Okue, Masayuki; Yagi, Yuzo; Ogane, Nobuo; Saitou, Yasunari
 PATENT ASSIGNEE(S): Snow Brand Milk Products Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 152 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9805648	A1	19980212	WO 1997-JP2765	19970807 <--
W: AU, CA, NZ, US				
BW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 10101650	A2	19980421	JP 1997-208425	19970718 <--
JP 3243733	B2	20020107		
CA 2234051	AA	19980212	CA 1997-2234051	19970807 <--
CA 2234051	C	20020903		
AU 9737841	A1	19980225	AU 1997-37841	19970807 <--
AU 734322	B2	20010607		
EP 855391	A1	19980729	EP 1997-934731	19970807 <--
EP 855391	B1	20031015		
AT 252082	E	20031115	AT 1997-934731	19970807
ES 2206739	T3	20040516	ES 1997-934731	19970807
US 5959107	A	19990928	US 1998-51404	19980528 <--
PRIORITY APPLN. INFO.:			JP 1996-223271	A 19960807
			JP 1997-208425	A 19970718
			WO 1997-JP2765	W 19970807

OTHER SOURCE(S): MARPAT 128:180412
 GI



I



II

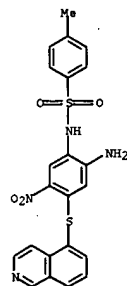
AB The title compds. I [Ar represents an optionally substituted aromatic ring,

L13 ANSWER 40 OF 362 CA COPYRIGHT 2005 ACS on STN (Continued)

etc., and n is 0, 1 or 2; R1 = H, nitro, etc.) are prepd. I have an inhibitory activity on nerve cell death of the apoptosis type. I are useful as preventives and remedies for neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease, Huntington's chorea and amyotrophic lateral sclerosis, ischemic cerebral diseases such as cerebral stroke, and peripheral nerve disorders obsd. in diabetes, etc. The title compd. II at 1 μM gave about 40% inhibition of 6-hydroxydopamine-induced death of nerve cells.

IT 203339-50-8P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of isoquinoline derivs. for the treatment of neurodegenerative diseases)

RN 203339-50-8 CA
 CN Benzenesulfonamide, N-[2-amino-4-(5-isoquinolinylthio)-5-nitrophenyl]-4-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'REGISTRY' ENTERED AT 10:32:47 ON 27 JUL 2005

L1 STRUCTURE UPLOADED

L2 685 S 1L SAM

L3 1222 S L1 FULL

FILE 'CA' ENTERED AT 10:33:31 ON 27 JUL 2005

L4 482 S L3

L5 403 S L4 AND PY<2000

L6 20 S L5 AND (PPAR OR DRUG?)

L7 18 S L5 AND DRUG?

L8 0 S L5 AND PPARY

L9 2 S L5 AND PPAR

L10 27 S L5 AND PHARM?

L11 2 S L5 AND MODULAT?

L12 41 S L6 OR L7 OR L8 OR L9 OR L10 OR L11

L13 362 S L5 NOT L12

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